DOCUMENT RESUME

ED 273 562 SO 017 560

AUTHOR Goldstein, Sidney; Goldstein, Alice
TITLE Migration in Thailand: A Twenty-Five-Year Review. Papers of the East-West Population Institute. No. 100.
INSTITUTION East-West Center, Honolulu, HI.
REPORT NO ISBN-0-86638-081-7
PUB DATE Jul 86
NOTE 63p.
AVAILABLE FROM East-West Population Institute, East-West Center, 1777 East-West Road, Honolulu, HI 96848 ($3.00).
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Economic Factors; Foreign Countries; Migration; *Migration Patterns; *Population Distribution; *Population Trends; Rural Population; *Rural to Urban Migration; *Rural Urban Differences; Urban Population
IDENTIFIERS *Thailand

ABSTRACT

Using data from the 1960, 1970, and 1980 censuses of Thailand, this paper explores the changing pattern of internal migration. Throughout the period, the census indicates a high degree of stability. Lifetime migration shows a slight rise in each period; recently it has risen in inter- as opposed to intra-regional movement. Five year interprovincial migration increased between 1955-60 and 1965-70 but declined in 1975-80. Between 1970 and 1980 interprovincial migration declined while interregional movement increased. Rural to rural migration declined while urban to urban movement became prevalent. Thus, by 1975-80 internal population redistribution had changed considerably from 1955-1960. Bangkok, the North, and the South had gained population while the Central and Northeast regions lost. Most recently, only Bangkok and the Central regions gained while the others lost population. The greatest loss was that of the Northeast, where net loss to Bangkok and the Central region alone accounted for three-fourths of the gains made by these two areas. These changing distributions are partly related to regional inequalities. Despite development efforts, the Northeast continues as the poorest region, while Bangkok and the contiguous provinces in the Central region profit from high levels of development and the capital's primacy. Migration patterns may also reflect greater reliance on temporary movement, in lieu of long-term migration, especially as transportation networks have improved. Thirty-three references conclude the document. (Author/APG)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED021562

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

David Ellis

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

PAPERS OF THE EAST-WEST POPULATION INSTITUTE, published about eight times a year, facilitate early dissemination of research findings and policy-relevant reports on the populations of Asia, the Pacific, and the United States. Cost per copy, $3.

NOTE TO CONTRIBUTORS: The Population Institute considers unsolicited as well as commissioned manuscripts for the Paper Series. Appropriate topics are demographic trends and estimation, fertility and family structure, economic development and human resources, urbanization and migration, and population policies and programs. All manuscripts are reviewed. In selecting manuscripts for publication, the Institute considers quality of scholarship and usefulness to public officials and other professionals in the field of population; it also seeks contributions reflecting diverse cultural and disciplinary perspectives on population. The series can accommodate articles not necessarily suited for journals because of unusual length or treatment of subject. All copy must be typed double-spaced. For additional information on manuscript preparation, write to Editor, Paper Series.

OTHER SERIAL PUBLICATIONS OF THE EAST-WEST POPULATION INSTITUTE

Working Papers are circulated for comment and to inform interested colleagues about work in progress at the East-West Population Institute. They are intended to complement evidence of completed work as reflected in Papers of the East-West Population Institute and the Reprint Series. $1 per copy.

Reprint Series brings selected articles originating from Institute research but published elsewhere to the attention of population specialists who might not otherwise see them. Single copies are free upon request.

Asian and Pacific Census Forum is a quarterly periodical reporting on census, vital registration, and population survey activities in Asia and the Pacific. The *Forum* contains technical articles on a range of topics related to demographic measurement, and reviews of new publications in the field. Issued in August, November, February, and May. Annual subscription rate, $5.

Serial publications except *Working Papers* are available without charge to libraries serving population specialists and to professionals and scholars in the field of population. Requests describing the nature of the research or program and the intended use of the publications should be addressed to Publication Sales and Distribution, East-West Center.

East-West Population Institute
East-West Center
1777 East-West Road
Honolulu, Hawaii 96848

Director Lee-Jay Cho
Senior Editor Sandra E. Ward
Editor David Ellis

Migration in Thailand: A twenty-five-year review

Sidney Goldstein
and Alice Goldstein

Number 100 • July 1986

PAPERS OF THE EAST-WEST POPULATION INSTITUTE

4

SIDNEY GOLDSTEIN is George Hazard Crooker University Professor, Professor of Sociology, and Director of the Population Studies and Training Center at Brown University, Providence, Rhode Island. ALICE GOLDSTEIN is Senior Researcher at the Population Studies and Training Center, Brown University.

Library of Congress Cataloging-in-Publication Data

Goldstein, Sidney, 1927-
Migration in Thailand.

(Papers of the East-West Population Institute ; no. 100)
Expanded version of a paper presented at the annual meeting of the Population Association of America, Boston, March 1985.
Bibliography: p.
1. Migration, Internal—Thailand. 2. Thailand—Population. I. Goldstein, Alice. II. Title.
III. Series.
HB2104.55.A3G639 1986 304.8'09593 86-16691
ISBN 0-86638-081-7

CONTENTS

Acknowledgments *vii*

Abstract *1*

The regions of Thailand *4*

Sources of data *9*

Lifetime migration *12*

Five-year migration patterns *19*

The relation of five-year to lifetime migration *24*

Five-year interregional migration streams *27*

- Gross migration levels *28*
- Net migration *30*

The largest interprovincial streams *32*

Interregional out-migration patterns *34*

Urban and rural movements *35*

- Urban growth *35*
- Rural–urban migration *37*

Reasons for migration *41*

The relation of migration to development *43*

References *51*

MAP AND TABLES

Map

The regions of Thailand 5

Tables

1. Selected demographic and economic indicators, by region: 1972–80 6
2. Lifetime interprovincial migration, by region: 1960, 1970, and 1980 14
3. Interprovincial recent migration, by region: 1955–60, 1965–70, 1975–80 20
4. Recent and lifetime migration compared: 1970 and 1980 25
5. Five-year migration as a percentage of lifetime migration, by region: 1960, 1970, 1980 27
6. Interprovincial recent migration streams, by region: 1955–60, 1965–70, 1975–80 29
7. Regional net gains and losses from recent migration: 1955–60, 1965–70, 1975–80 31
8. Regional flows of the largest interprovincial migration streams: 1965–70 and 1975–80 33
9. Interregional out-migration, by region: 1955–60, 1965–70, 1975–80 35
10. Urban–rural recent migration streams: 1965–70 and 1975–80 38
11. Reasons for migration, by urban–rural stream and by sex: 1975–80 42

ACKNOWLEDGMENTS

This paper is an expanded version of one presented at the annual meeting of the Population Association of America, Boston, in March 1985. The research was supported in part by the American Express Foundation, the Ford Foundation, and the William and Flora Hewlett Foundation. The authors are grateful for the cooperation of the National Statistical Office and Ms. Chintana Pejaranonda in making data available, as well as for the helpful comments of Drs. Fred Arnold, Lawrence A. Brown, and Theodore D. Fuller.

ABSTRACT Using data from the 1960, 1970, and 1980 censuses of Thailand, this paper explores the changing patterns of internal migration. Throughout the period, the census measures indicate a high degree of stability; no census found more than 15 percent of the population living outside the province of birth and fewer than 7 percent were identified in any period as interprovincial five-year migrants. Lifetime migration, because it is a cumulative measure, shows a slight rise in each period, and in the most recent decade it displays a rise in inter- as opposed to intraregional movement. The findings also document that five-year interprovincial migration increased between 1955–60 and 1965–70 but declined during 1975–80. Especially noteworthy between 1970 and 1980 were the decline in interprovincial migration within regions and the rise in interregional movement. Concurrently, rural-to-rural migration declined sharply and movement between urban places became more prevalent. Thus, by 1975–80 the overall pattern of internal population redistribution in Thailand had changed considerably from that of 1955–60. Bangkok, the North, and the South had all gained at the expense of the Central and Northeast regions. More recently, however, only Bangkok and the Central region gained whereas the other three lost population. The greatest loss was that of the Northeast, where net loss to Bangkok and the Central region alone accounted for about three-fourths of the gains made by these two areas. These changing distributions are related at least in part to regional inequalities. Despite development efforts, the Northeast continues to be the nation's poorest region, while Bangkok and the contiguous provinces in the Central region profit from high levels of development and the capital's primacy. Changing migration patterns may also reflect greater reliance on temporary movement (which is not documented by censuses) in lieu of more long-term migration, especially as transportation networks have improved as part of the development process.

The developing world continues to experience rapid population growth; sharp increases in the size of urban populations, in the level of urbanization, and in the number of cities, especially big cities; and continuing rural growth (United Nations 1985:181–206). This situation presents a complex set of developments to challenge research and policy formulation efforts. They point to a pressing need for attention to population movement as a key component in population dynamics. Indeed, as fertility is brought increasingly under control, migration seems likely to account more and more for differential growth rates between rural and urban places and between regions, and for changes in the population composition of given areas.

Migration's current importance as a component of population change in both urban and rural places is attested to by the magnitude of the populations involved. Between 1950 and 1975, an estimated 330 million persons, equal to almost one-fourth of the rural population in developing countries at mid-century and greater than the total urban population at that time, shifted residence from rural to urban places (World Bank 1984:97). Yet these

estimates encompass only a portion of the total volume of population movement, since they exclude temporary migration and moves within rural areas and between urban places. The importance of redistribution as a factor in demographic change and in the development process is indisputable, even though its direct contribution to urban growth today is less than it was in earlier decades; natural increase, including a large number of births attributable to migrant parents, now accounts for about 60 percent of all urban growth in less developed countries (LDCs).

Compounding the complexities of the role of permanent migration in urban growth and development is the simultaneous inflow of temporary migrants into urban places. Although this form of population movement has until recently received only scant attention, a growing body of evidence (Chapman and Prothero 1983) strongly suggests that such movement, which is largely circular—consisting, that is, of migrants who return to rural areas on a regular basis—plays a key role in the adjustment strategies of individuals and households to changing conditions at origin and destination.

The nearly universal concern in developing countries with problems of population distribution was documented by the 1981 United Nations (1982:193) survey of 126 governments in less developed countries. Only six (all small states) considered the distribution of their populations to be appropriate. Virtually all governments in Asia, the Middle East, and Africa considered their population distribution to be only partially appropriate or inappropriate. Three-quarters were pursuing policies to slow or reverse internal migration (World Bank 1984:97). The Mexico City Declaration on Population and Development acknowledged this situation (International Conference on Population, 1984). It included a call for attention in the second decade after the International Population Conference not only to high rates of internal migration, urbanization, and concentrations of populations in the large cities of less developed nations, but also to the new forms of mobility that characterize less developed countries and may have positive or negative consequences for development.

The view that migration is inherently unfortunate is particularly prevalent in less developed nations, where officials and elites tend to focus on migration's presumed or real negative impacts. They therefore advocate policies to slow or redirect movement. In contrast, a growing number of economists and other experts view migration as a universal concomitant of socioeconomic development, producing many desirable (and, in the long run, indispensable) economic and social consequences (United Nations 1984). According to this view, most nations would be best advised to design policies and programs to ease the adjustment problems associated with migration and to increase the benefits of migration. Only in some nations would policies designed to slow or redirect migration be warranted.

Clearly, migration and population distribution are topics of intense policy concern in much of the world. Yet progress in understanding the dynamics of mobility has been hampered by poor conceptualization and by misleading perspectives on the issues, as well as by data deficiencies (Goldstein and Goldstein 1981; Findley 1982). Some of these obstacles are being reduced as more attention is given to the refinement of concepts, coverage of the varied forms of movement, and collection and analysis of better data sets. Thailand is one of many less developed countries in which population redistribution has assumed increased importance, for both demographic change and development. This situation, coupled with the availability of a growing body of migration data, prompts the current assessment of Thailand's experience over the last several decades.

Compared with other less developed countries, Thailand experienced particularly rapid social and economic change between 1960 and 1980. Its per capita gross national product (GNP) grew faster than all but that of eleven other LDCs, averaging 4.6 percent over the course of the two decades (ESCAP, Population Division 1984:1). Rapid change is also indexed by the growing percentages of boys and girls enrolled in school, the expansion of cultivated lands concurrent with the emergence of a small industrial sector (mainly around Bangkok), and a substantial shift away from self-employment in agriculture to salaried occupations outside the primary sector. A vigorous family planning program has helped Thailand witness a considerable decline in its population growth rate. From a high of 3.2 percent in 1960, the annual growth rate declined to 2.6 percent by 1980 (ESCAP 1982:5). Even with this reduction, the population grew from 26.2 to 44.3 million, with resultant sharp increases in population density and considerable pressure on resources in various parts of the country.

Although Thailand remains largely agricultural, the vast majority of the population has participated in and benefited from the development process. For example, the percentage living below the poverty line has halved since 1962/63 (when it was 52 percent), though 25 percent were still identified in 1975/76 as living below the poverty line (ESCAP 1982:70–71). The degree and nature of participation, however, have differed substantially among the country's regions as well as between the rural and the urban populations. The growing opportunities outside agriculture, in both urban and rural locations, provide new stimuli for migration and new opportunities to improve living standards without geographic movement. Migration may be a particularly attractive mechanism for persons in less developed areas of the nation to realize their aspirations for a higher quality of life and to enable them to participate more fully in the growth process characterizing the country as a whole.

Given the changes that Thailand has experienced and the generally held assumption that migration will increase as economic development progresses (Caldwell 1967), the availability for Thailand of a fairly comparable set of migration statistics from three censuses—1960, 1970, and 1980—provides a unique opportunity to assess the changing rates and patterns of migration and, in turn, their relation to regional and rural–urban differences in development. This paper uses the lifetime and particularly the five-year migration data from the three censuses, covering the twenty-five years from 1955 to 1980, to evaluate changes in levels and patterns of regional migration streams and, within the limits of available data, of rural–urban streams. Reasons for recent migration documented in the 1980 census are also assessed. The changing patterns of migration are then related to regional development. Before turning to the data, we briefly give our attention to a description of Thailand's four regions and its capital, Bangkok, and to a discussion of the censuses as data sources.

THE REGIONS OF THAILAND

For statistical purposes, Thailand is usually subdivided according to its natural topography into four regions. The valleys of the Chao Phraya and several smaller rivers, the Khorat plateau of northeastern Thailand, and several coastal provinces form the North, Northeast, and Central regions.[1] The narrow peninsula extending to the Malaysian border constitutes the nation's fourth region—the South (see Map). Bangkok, because of its unique characteristics and important position in the nation's administrative and economic structure, is generally treated apart from the four regions. (Selected demographic and economic indicators for the regions are shown in Table 1.)

The largest region is the Northeast. It encompasses 170,000 square kilometers and, in 1980, about one-third of the country's population. Its topography is characterized by a geological plateau formed of red sandstone. A shortage of water makes cultivation heavily dependent on the monsoon rains. Population settlement tends to be fairly dense in the river valleys, and under the pressure of population growth it has spread into the drier areas of the region. In addition to rice, large quantities of corn, kenaf, and tapioca are grown. Since the 1960s the government has made concerted development efforts to raise the region's low living standard. Improved irrigation and widespread road construction have been major aspects of the program to help the farming population and to integrate the region more fully into Thai economic development. Because of its physical and economic

1. Material in this section is derived largely from Tirasawat (1977) and ESCAP (1982).

Map. The regions of Thailand

Table 1. Selected demographic and economic indicators, by region: 1972-80

	Bangkok	Central	Northeast	North	South	Whole Kingdom
Population, 1980[a]	4,640,972	9,615,966	15,548,382	9,017,911	5,541,488	44,364,719
Percentage urban, 1980[a]	100.0	9.9	4.0	7.5	12.6	17.0
Density per km², 1980[a]	2,965.5	94.0	92.1	53.2	78.4	86.5
Growth rate, 1970-80[b]	4.3	2.4	2.5	1.8	2.7	2.5
Crude birth rate, 1974-75[c]	32.6	34.1	45.0	26.6	41.4	37.0
Crude death rate, 1974-75[c]	4.3	6.8	10.0	10.3	8.9	8.9
Percentage change in gross reproduction rate, 1964-65/1974-75[d]	u	-20.7	0.0	-43.8	+6.9	-19.3
Percentage of current contraceptive users, 1975[d]	50	45	30	44	18	u
Average annual household income, 1975-76 (in baht)[c]						
Total urban	41,400	42,360	36,610	38,960	40,330	40,730
Total rural	—	25,540	16,530	16,480	18,870	18,810
Rural agricultural	—	25,490	14,270	15,620	14,390	17,100
Rural nonagricultural	—	25,560	23,450	18,390	25,430	22,850
Mean size of holdings, 1974 (in rai)[c]	—	38.5	31.7	27.9	24.7	31.0
Percentage of farm operators who were owners, 1973-74[c]	—	57	89	69	83	77
Percentage of population below poverty line, 1975-76[c]	9	12	36	27	25	25
Urban	9	10	13	13	13	13
Rural	—	12	38	28	26	28

Relative gross regional product per capita (1975 national = 100)[c]	270	142	43	74	98	100
Per capita expenditures in Third National Plan, 1972-76 (in baht)[d]	3,815	1,761	1,519	1,762	1,982	u

u—data unavailable.

a. Thailand, National Statistical Office (1983b).

b. ESCAP (1982).

c. Lim et al. (1980); 1 rai = 0.16 hectare.

d. Cochrane (1979).

disadvantages, the region has experienced high rates of out-migration to other parts of Thailand.

The North covers as large an area as the Northeast, but in 1980 it contained only about 20 percent of Thailand's population. The region is mountainous and endowed with dense forests and fertile valleys. In contrast to the Northeast, water is generally ample, so that the production of rice, tobacco, timber, cattle, and a variety of vegetables and fruits permits the population to maintain a better living standard than in the Northeast. The uplands of the North are thinly populated, in part because of poor transportation networks. It is here that a considerable number of the non-Thai people live.

The Central region covers just over 100,000 square kilometers and accounted in 1980 for 22 percent of Thailand's population. This region, which receives the waters of four great rivers and encompasses the central plain, is often described as the "rice bowl of Southeast Asia." In the well-watered coastal plains of the southeastern part of the region, tapioca, rubber, pepper, and tropical fruits are extensively cultivated. Transportation by boat, rail, and road across the region is good, with much of the network radiating toward Bangkok, near the mouth of the Chao Phraya River.

The South, with an area of only about 70,000 square kilometers, constitutes the smallest geographic region of Thailand, and its 5.6 million people (1980) account for the smallest percentage of the country's population. Owing to the semiannual monsoon in the South, rainfall and water supplies are generally plentiful, permitting farmers to enjoy a high living standard. In addition to its rich agricultural products, including tobacco, fruits, vegetables, and rubber, the South relies upon tin extraction and fish for income. Subsistence rice cultivation in the region is a secondary activity. Like the Northeast, but for somewhat different reasons, the South is isolated from the other parts of Thailand. The South's geographic configuration and topography account for this isolation, sometimes making communication with other parts of the country difficult. One-fourth of its population is Muslim, in contrast to the heavy predominance of Buddhism elsewhere in the nation. The Thai Muslims, concentrated in the southernmost provinces of the region, are culturally and economically oriented more toward Muslim Malaysia than to Buddhist Thailand. The government has made concerted efforts to improve the quality of life in the region and to integrate it more fully with the rest of the kingdom.

Bangkok, with its 4.7 million people, is the political, cultural, commercial, and social center of Thailand. Historically, Bangkok has always maintained a dominant position; railway lines, highways, and air routes converge on it from all parts of Thailand, and its links to the rest of Southeast Asia and the world at large have proliferated in the post World War II era. Even

though a number of the smaller cities in the North and Northeast were much nearer to each other than to Bangkok, until the late 1960s communication between them generally had to be channeled through Bangkok itself. This situation has changed considerably, but the capital's dominance as an integrating center for the nation's political, economic, social, and intellectual life has persisted; in fact, as judged by demographic statistics alone, its primacy has increased. Whereas in 1947 Bangkok's population was twenty-one times greater than that of Chiang Mai, the next largest city in Thailand, in 1960 it was twenty-seven times greater, in 1970 thirty-two times greater, and in 1980 forty-six times greater. A substantial part of the increase between 1970 and 1980 was due to the extension of the municipal boundaries in 1972 to encompass the total areas of Phra Nakhon and Thonburi Provinces (in which the Bangkok municipality is situated). It must be added, however, that even as the nation's population is increasingly concentrated in the southern part of the Central Plain, where Bangkok is located, the twentieth century has also witnessed the develoment of regional towns and a substantial urban hierarchy, although one in which Bangkok clearly dominates (ESCAP 1982:11).

SOURCES OF DATA

In 1967 an ECAFE[2] (predecessor of ESCAP) Working Group concluded that the magnitude of problems associated with migration and urbanization in the ECAFE region necessitated improved data on these phenomena and policy-oriented analysis (ECAFE 1967). Fortunately, the situation in a number of countries in the region, including Thailand in particular, has improved considerably since then. In fact, Thailand had already paid attention to migration in the 1954 Demographic and Economic Survey of Thailand (Thailand, National Economic Development Board 1957) and in the 1960 census. Continued attention was given to migration in the 1970 and 1980 censuses, as well as in the National Longitudinal Study of Social, Economic, and Demographic Change in Thailand (e.g., Prachuabmoh et al. 1971) and in a series of other studies (e.g., ASEAN Population Programme 1981; Chamratrithirong et al. 1979). Thailand thus has the distinction of being one of only a few developing countries in which the assessment of migration and its relation to urbanization and rural development has become a major focus.

Because attention to migration arose there early, data sets encompassing several decades provide an opportunity to assess changing migration patterns and to relate them to urbanization and rural development. The

2. United Nations Economic Commission for Asia and the Far East, renamed Economic and Social Commission for Asia and the Pacific in 1974.

following analysis relies almost exclusively on the published data from the 1960, 1970, and 1980 censuses. This approach is used in the interest of obtaining maximum comparability over time and coverage of the entire kingdom, rather than of particular communities or sample areas covered by special surveys. Although the censuses were not always consistent in the definitions they used, in the amount of detail obtained, and in the ways in which the data were tabulated, they do provide a reasonably comparable set of data covering 1960–80. Their value is enhanced by the large numbers of migrants included. By contrast, sample surveys often are not able to give adequate representation to all parts of a country and therefore may not allow comparative analysis of regional or urban–rural differentials. They also generally include few migrants, given the overall sample size and the small proportion of the total sample that migrants usually constitute. Finally, comparability among surveys may be difficult because of the varying definitions of migration used. Before proceeding to the analysis of the data, some attention should be given to the definitions employed and the kinds of statistics that result.

In all three censuses each person enumerated was counted as an inhabitant of the place where he or she usually lives or sleeps. In 1960 two questions were asked to measure migration: the province of birth (or country, if born outside Thailand) and the province of residence five years prior to 25 April 1960. Thus the 1960 census provides the basis for identifying two sets of migrants: those persons living in a province other than the one where they were born (i.e., lifetime migrants) and those persons living in a province other than the one where they had resided five years earlier (i.e., five-year or recent migrants). Because the 1960 census did not ask a question on the urban or rural character of the migrants' place of birth or place of residence five years before the census, the 1960 census data do not allow measurement of flows between rural and urban places.

The 1970 census also obtained information concerning how long each person (age 5 and over) had been living in the current place of residence (village or municipal area). For those reporting movement within the previous five years, information on the last previous place of residence was obtained: both the province (or country) and whether it was urban or rural. Information on the rural or urban character of origin for recent migrants in the 1970 census allowed several analyses that were not possible from 1960 census data. It must be noted, however, that the 1970 wording of the five-year question differed from that in 1960; it did not refer to a particular date five years earlier (fixed point question) but rather called for information on length of residence in the current place, regardless of when the move had been made. The census then ascertained the rural or urban character of origin only for persons reporting a move within the five years preceding

the census. These data on migration in the five years preceding the census are used in the analysis that follows. Even though later references to data based on this question may refer to such migration as five-year migration, this distinction between the 1970 and the 1960 data must be kept in mind.

The 1980 census used the same basic questions as in 1970, and therefore the 1970 and 1980 census data are more comparable to each other than either is to the 1960 census. Furthermore, in a new 1980 census question, those who had changed place of residence between 1975 and 1980 were asked the reasons for their move. The resulting information may add important insights to our understanding of population redistribution in Thailand.

Both the lifetime and the five-year migration data for Thailand have all the defects inherent in these types of migration statistics (Goldstein and Sly 1975:143–201). The lifetime migration statistics, based on place of birth, do not indicate, for example, when the move had been made for those who were living in a province different from the province of birth, nor do they indicate how many moves were made in the period between birth and the census. Moreover, all those who had returned to their place of origin were not identified as having made any move at all. The fixed-point five-year question has some of the same limitations, although these may be less serious because, for most individuals, the period encompassed is much shorter than for the lifetime question. Nonetheless, it records only a single move and overlooks intermediary ones. The phrasing of the question (*how long* the individual has been living in the current place of residence) overlooks all moves preceding the last one; in the case of persons who moved more than once during the most recent five-year period, it therefore fails to identify the place of residence exactly five years before the census.

For both questions, accuracy of recall may be a serious problem, as may changes in boundaries and in the classification of places as rural or urban. In addition, underenumeration in the census has been estimated at about 3 percent in 1960 (Das Gupta and Sen Gupta 1967), between 1.7 and 5.3 percent in 1970 (Arnold and Phananiramai 1975), and 4.5 percent in 1980 (Pejaranonda et al. 1983). Persons missed by the census may consist disproportionally of migrants, and their omission therefore may deflate the overall migration rates derived from the tabulated data and distort comparisons, especially if the underenumeration is disproportionally concentrated in specific locations.

The use of provinces as the basic unit for delineating migration also presents problems, since provinces are basically political units; they vary in size, shape, and how the population is concentrated within them. To the extent that a migrant is defined as anyone who crosses a provincial boundary, the extent and direction of migration may be affected by the na-

ture of the boundary system itself. This drawback does not introduce serious problems of comparability over the twenty-year period encompassed by our evaluation, since only minor changes in boundaries have occurred during the interval. In 1972 two provinces—Phra Nakhon (the province that originally encompassed Bangkok) and Thonburi Provinces—were merged into the Bangkok Metropolitan Area. Before the merger the census had counted movement between the two provinces as interprovincial migration. To make the 1960 and 1970 census data comparable to those from 1980, persons moving between the two former provinces have been defined as residential movers and not counted as migrants. Between the 1970 and 1980 censuses, two new provinces were created through the subdivision of Ubon Ratchathani Province in the Northeast region of Thailand and Chiang Rai Province in the North. Adjustment has been made for these changes in boundaries in the lifetime and five-year migration data, so that the data for 1980 are comparable to those for earlier censuses. For such purposes, persons moving between the two provinces created either from Ubon Ratchathani or from Chiang Rai are not counted as interprovincial migrants.

LIFETIME MIGRATION

In 1960, when the Thai census first compiled migration data for systematic analysis, 11 percent of the Thai population reported themselves as living in a province different from that in which they had been born. Comparison of this level of lifetime mobility with that characterizing other more or less developed countries is difficult because of differences both in development level and in the areal units used. For example, in India, where the average size of a state is 212,380 square kilometers, 3.3 percent of the 1961 population were enumerated in a state different from their state of birth (Bose 1965:598). In the United States, where the average size of the forty-eight continental states is 163,170 square kilometers, the 1960 census enumerated 26 percent of the native-born population outside their state of birth (U.S. Bureau of the Census 1964:Table 68). Differences in size of units, in development levels, in traditions affecting attitude toward movement, and in population composition can all affect comparability in the migration levels of different countries.

Given the relatively small average size of a Thai province (about 15,022 square kilometers), the Thai level of lifetime migration is not particularly high; yet such a conclusion must be qualified in view of the high Thai birth rate in the 1950s. High fertility, resulting in disproportionally more persons in the very young ages, inflates the proportion of persons living in their birthplace simply because children have not yet had as much opportunity to move. In 1960, for example, almost one-third of the Thai population was under 10 years old, compared with just over one-fifth in the United

States. When adjustment is made for age by restricting measurement of lifetime migration to persons 13 years old and older, the percentage of Thais living outside their province of birth rises to 16 percent of the population, a level that is still low in comparison to the United States.

In commenting on the small proportion of the 1960 Thai population involved in lifetime migration, Caldwell (1967:49) noted that an increased rate of internal migration may have to await the countrywide development of a modern transportation system and higher industrialization levels throughout the kingdom. Until then, most provincial towns could be expected to grow only moderately, while Bangkok's primacy and attractiveness for migrants continued. Both the interregional comparisons for 1960 and the changes in levels of lifetime migration between 1960 and 1980 support such an expectation.

In 1960 the percentage of lifetime interprovincial migrants in the population varied considerably by region (Table 2). Reflecting its dominance in the Thai urban, political, economic, social, and educational structure, Bangkok[3] contained a far higher percentage of lifetime migrants in its population than did the other four regions of Thailand: 22.8 percent in Bangkok compared with 7.7 to 10.9 percent in the other regions. Surprisingly, among the four regions, the level of migration was highest in the Northeast, the poorest region in the nation. This finding suggests that the high lifetime interprovincial migration levels reflect redistribution of population within the region rather than movement to the region. Unfortunately, the available data on 1960 lifetime migrants do not allow a subdivision of the total interprovincial migrant group into those moving within and between regions. The somewhat lower levels of lifetime migration characterizing the North and South suggest their comparative isolation from other parts of Thailand in the years preceding 1960 and their lack of attractiveness compared with the Central region and especially Bangkok.

By 1970 lifetime migration levels rose for Thailand as a whole, as well as for three of the four regions. In the 1970 census 13.1 percent of the population reported themselves living in a province other than their province of birth. The particularly substantial increase (almost 50 percent) in Bangkok's population between 1960 and 1970 testifies to the importance of migration in the capital's growth; 27 percent of the capital's 1970 population was born elsewhere in Thailand. The even more dynamic changes characterizing development in Thailand as a whole during that interval, as well as population pressures growing out of high rates of population growth in most parts of the country, were reflected in sharp rises in the regional lifetime migration levels. In the Central region, the percentage of lifetime migrants rose from 10.3 to 14.4 percent, in the North from 8.5 to 12.6 per-

3. "Bangkok" refers to the combined provinces of Phra Nakhon and Thonburi.

Table 2. Lifetime interprovincial migration, by region: 1960, 1970, and 1980 (Numbers in thousands)

Region of residence and year	Total population		Living in province of birth		Not living in province of birth						Foreign-born	
					In same region		In another region		Total interprovincial migrants			
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
1960												
Whole kingdom	26,258	100.0	23,009	87.3	u	u	u	u	2,761	10.8	488	1.9
Bangkok	2,136	100.0	1,426	66.7	u	u	u	u	486	22.8	224	10.5
Central	6,135	100.0	5,395	88.0	u	u	u	u	634	10.3	106	1.7
North	5,723	100.0	5,054	90.9	u	u	u	u	625	8.5	44	0.6
Northeast	8,992	100.0	8,169	88.3	u	u	u	u	765	10.9	57	0.8
South	3,272	100.0	2,965	90.6	u	u	u	u	251	7.7	57	1.7
1970												
Whole kingdom	34,397	100.0	29,557	85.9	2,521	7.3	1,970	5.8	4,491	13.1	350	1.0
Bangkok	3,077	100.0	2,075	67.4	—	—	838	27.2	838	27.2	165	5.4
Central	7,534	100.0	6,375	84.6	789	10.5	297	3.9	1,086	14.4	74	1.0
North	7,489	100.0	6,508	86.9	474	6.3	470	6.3	944	12.6	37	0.5
Northeast	12,025	100.0	10,790	89.7	975	8.1	224	1.9	1,199	10.0	36	0.3
South	4,272	100.0	3,809	89.2	283	6.6	141	3.3	424	9.9	38	0.9

1980												
Whole kingdom	44,364	100.0	37,854	85.3	2,756	6.2	3,482	7.9	6,238	14.1	272	0.6
Bangkok	4,641	100.0	3,243	69.9	—	—	1,268	27.3	1,268	27.3	130	2.8
Central	9,616	100.0	7,841	81.5	796	8.3	929	9.7	1,726	18.0	49	0.5
North	9,018	100.0	7,781	86.3	558	6.2	640	7.1	1,198	13.3	39	0.4
Northeast	15,548	100.0	14,033	90.3	1,030	6.6	454	2.9	1,484	9.5	31	0.2
South	5,541	100.0	4,956	89.4	371	6.7	191	3.4	562	10.1	24	0.5

Source: Thailand, National Statistical Office (1962, 1973, 1983b).

Note: Persons whose place of birth is unknown are excluded from the tabulations.

cent, and in the South from 7.7 to 9.9 percent. The Northeast was characterized by a slight decline in lifetime migration levels, although the absolute number of its migrants increased. As indicated earlier, these patterns fail to take into consideration the effects of natural increase or possibly differential mortality between migrants and nonmigrants, so that the percentage of lifetime migrants in a region's population is not a clear measure of change.

The 1970 data allow some refinement in the analysis of lifetime patterns, by dividing migrants between those moving within regions and those moving between regions. In 1970 intraregional lifetime migration exceeded interregional migration by about 25 percent. Since short-distance movement is generally more frequent than long-distance movement, this finding is not surprising. What are perhaps more interesting are the differentials in the relative distribution of intra- and interregional migrants in the nation's regions. For three of the four regions, cumulative within-region movement was considerably greater than between-region movement. The differential was sharpest for the Northeast, reflecting its low attraction for migrants from other parts of Thailand because of its much poorer economy. By contrast, the North had a virtual balance in the division between inter- and intraregional movers, possibly because Thailand's second largest city, Chiang Mai, is located within the region. The substantial growth in teak production during the decade (Thailand, National Statistical Office 1972:229), especially in the North, may also have added to that region's attractiveness to migrants.

Despite the rising lifetime migration level, perhaps the most interesting observation emerging from the 1970 and 1960 data is the high percentage of Thai who were living in their province of birth. With the exception of Bangkok, this amounted to at least 85 percent of native-born Thai and reached almost 90 percent in the Northeast and in the South. Moreover, for the smaller percentage who had made a move across provincial lines during their lifetime, most had stayed within their region of birth.

By 1980 the percentage of lifetime migrants had risen again slightly, reflecting in part the cumulative character of this measure of migration; 14 percent of all Thai were living outside the province in which they had been born. That the percentage for Bangkok remained virtually the same as in 1970 partly reflects the mortality of the earlier in-migrants and the disproportionate number of nonmigrants who were born in the capital to both earlier migrants and to the growing number of native-born residents. It also reflects a greater degree of stability in the capital's growth rate and the increasing attraction of suburban developments in the surrounding provinces to migrants who might have moved to Bangkok. The greater than average rise in interprovincial migrants in the Central region reflects this change. In the Northeast and the South, the lifetime migration level also remained

virtually unchanged between 1970 and 1980, while the level in the North rose. Most interesting in 1980 is the substantial shift in the distribution of lifetime migrants between those who moved within a region and those who moved between regions. In contrast to 1970, for the country as a whole a higher percentage of the lifetime migrants in 1980 had moved between regions; this change also characterized both the Central region and the North.

By definition, any move to the Bangkok Metropolitan Area is an interregional migration, and such movement accounted for 36 percent of all interregional migration in Thailand. Yet, relatively speaking, this was a decline compared with 1970, when 42 percent of all interregional lifetime moves were to Bangkok. The Central region had the largest increase by far between 1970 and 1980, in both absolute and relative terms; its interregional migrants increased from 297,000 in 1970 to over 900,000 in 1980. A substantial part of this change undoubtedly is attributable to spillover from Bangkok; but the data also make clear that the Central region has become increasingly attractive to migrants from other regions as well, partly because of its proximity to the capital. These data point, therefore, both to rising levels of migration as measured by lifetime movement and to an increasing amount of longer-distance movement as measured by interregional migration.

In 1980, as in 1960, Bangkok remained the area with the largest percentage of lifetime migrants in its population, but the growing importance of migration nationally is evidenced in the increasing percentages of lifetime migrants in the Central, North, and South regions. Nonetheless, with the exception of Bangkok, at least 80 percent of the population in each region (substantially more in the South and Northeast) were born in their 1980 province of residence. While some of these persons may have moved and returned to their province of birth and others may have made moves within the province, the low levels of interprovincial movement indicated by these statistics point to a high degree of population stability in Thailand as measured by these lifetime data. Whatever adjustments are made to changing social and economic conditions apparently take place for most individuals within the confines of the provinces in which they were born. Such adjustments may take the form of interrural or rural-to-urban movement, temporary movement in the form of commuting or circulation, or *in situ* adjustments through occupational changes or changes in fertility.

A major limitation of the lifetime data is the inability to use them directly to measure migration during any specific period, because they do not indicate when a move occurs. It is possible, however, to use these data to obtain crude indications of the volume of intercensal migration in Thailand. Such estimates can be derived by comparing the numbers of net lifetime

migrants in successive censuses, taking account of mortality to migrants in the intervening ten years (Shryock and Siegel and Associates 1976:384–90; United Nations 1970:5–14). Assuming, on the basis of the life table data for Thailand, that about 10 percent of the 1960 lifetime migrants did not survive to 1970, such estimates indicate that between 1960 and 1970 a net redistribution of 313,000 persons occurred among the regions of Thailand, equivalent to about 1.2 percent of Thailand's 1960 population of 26.3 million. Indicative of the overriding attraction of Bangkok in this period, 293,000 of the total redistribution was to the capital city. In the interchange between the other regions, the North gained a net of 20,000 persons. The estimates suggest that the Central region lost 161,000 persons and the Northeast, 131,000. The South also was a net loser, but of only 21,000 persons.

Similarly, a net regional interchange of 432,000 persons is estimated to have occurred between 1970 and 1980. Although larger in absolute terms than the 313,000 net redistribution occurring in 1960–70, the 1970–80 interregional movement is equivalent to just under 1.3 percent of the 1970 Thai population of 34.4 million, about the same rate as in the earlier decade. This estimate suggests that the most recent decade did not witness a rising pace of interregional migration, as measured by the lifetime data, despite Thailand's continuing development.

The 1970–80 intercensal period did, however, witness a noticeable shift in the regional distribution of gains and losses. The Central region replaced Bangkok as the largest gainer of migrants, with a net gain of 228,500 compared with 203,600 for the capital. Such a large gain for the Central region is particularly noteworthy, given the net intercensal loss in the earlier decade of 161,300 migrants, mostly to Bangkok. Other 1970–80 data suggest that the Central region was gaining growing numbers of migrants in its exchange with other regions and had achieved a virtual balance in its exchange with the capital itself. During the same period the North, Northeast, and South were all losing migrants in their exchanges with other regions of the kingdom, and their losses were substantially above the 1960–70 levels. In the North the net interchange in fact was reversed from a gain to a loss.

Although the method employed to ascertain these intercensal migration estimates is crude because the data are based on census lifetime migration, the results suggest that a plateau in the overall level of net interregional movement was achieved in Thailand in 1970–80. They point as well to considerable change in the pattern of gains and losses among the individual regions. Assessment of the more direct measures of migration available from the 1960, 1970, and 1980 censuses on movement among provinces and regions in the five years immediately preceding each census should allow more precise determination of the changes that occurred over those several decades.

FIVE-YEAR MIGRATION PATTERNS

The data on five-year interprovincial movement from the 1960 census suggest a high degree of population stability (Table 3). Of the 22 million persons 5 years old and older in 1960, only 3.6 percent had been living in a different province in 1955. Moreover, the majority of those who had migrated did so within the same region. Overall high levels of stability were thereby reinforced to some extent because those who moved tended to remain within the same region.

These patterns did not characterize all regions to the same degree. As expected because of its prominent place in the Thai urban hierarchy and the social and economic structure, Bangkok had proportionately more recent migrants in its population in 1960 than did any other region of Thailand. According to the census, over 130,000 persons (7.3 percent of the capital's population) had moved there since 1955. Given the rate at which the capital had been growing, this number seems low. Some who lived in the capital may have considered themselves temporary residents only and may have expected to stay in Bangkok only a short time (Chamratrithirong et al. 1979). Under census procedures, such persons would have reported their usual residence as their place of origin and been counted in those places, even though they may in fact have been living in the capital for a year or more. Their omission would lead to considerable underenumeration of recent movement to the city.

In contrast to Bangkok, the percentage of the population identified as recent migrants in other regions in 1960 ranged from a low of 2.7 percent for the Northeast to a high of 4.1 percent for the Central region. The latter's greater attraction reflects not only its better economic status compared with other regions of Thailand but also its proximity to Bangkok, making it attractive to migrants both from Bangkok and from other regions of the country who would like to live at least near the capital. Differences among the three other regions were minimal.

For all regions in this period, a minority of the migrants moved between regions. This percentage varied from just over 40 percent for the Central region and the North to only 12.6 percent for the Northeast. These differences are correlated with the socioeconomic levels characterizing these regions and, to a degree, with their distance from Bangkok. The Northeast was clearly unattractive to migrants from other regions; the very poor economic conditions in the region contributed to its being an area of high outmigration as well. The South's lack of attractiveness is probably due to its distance from the other regions and the predominantly Muslim character of some of its provinces.

By 1970 the overall level of five-year migration in Thailand had risen considerably, reflecting the dynamism of the 1960s. Although the total popu-

Table 3. Interprovincial recent migration, by region: 1955–60, 1965–70, 1975–80 (numbers in thousands)

Region of residence	Total population, ages 5 and over	Migrants within region		Migrants between regions		Total interprovincial migrants[a]		% of migrants making interregional moves
		Number	% of total population	Number	% of total population	Number	% of total population	
1955–60								
Whole kingdom	22,019	454	2.1	335	1.5	789	3.6	42.5
Bangkok	1,806	[b]	[b]	131	7.3	131	7.3	100.0
Central	5,176	124	2.4	86	1.7	210	4.1	41.0
North	4,755	91	1.9	66	1.4	157	3.3	42.0
Northeast	7,508	180	2.4	26	0.3	206	2.7	12.6
South	2,773	59	2.1	26	0.9	85	3.0	30.6
1965–70								
Whole kingdom	28,738	905	3.2	770	2.7	1,675	5.9	46.0
Bangkok	2,695	[b]	[b]	299	11.1	299	11.1	100.0
Central	6,364	248	3.9	208	3.3	456	7.2	45.6
North	6,345	196	3.1	120	1.9	316	5.0	38.0
Northeast	9,773	330	3.4	100	1.0	430	4.4	23.3
South	3,562	131	3.7	43	1.2	174	4.9	24.7

1975–80								
Whole kingdom	39,380	755	1.9	858	2.2	1,613	4.1	53.2
Bangkok	4,250	b	b	341	8.0	341	8.0	100.0
Central	8,626	218	2.5	285	3.3	503	5.8	56.7
North[c]	8,112	166	2.0	104	1.3	270	3.3	38.5
Northeast[c]	13,512	241	1.8	74	0.6	315	2.4	23.5
South	4,879	130	2.7	54	1.1	184	3.8	29.3

a. Excludes migrants whose province of origin is unknown.

b. Movement between the provinces of Phra Nakhon and Thonburi was not considered interprovincial migration; by 1975–80 the two provinces had been merged to form the Bangkok Metropolitan Area.

c. Adjusted for movement between the province split into two provinces between 1970 and 1980. Such movement was not considered interprovincial migration.

lation of ages 5 and over increased by about one-third during the decade, the number of migrants in the five years preceding the decennial census more than doubled, to 1.7 million, and their percentage in the total population increased from 3.6 to 5.9 percent. Evidently, migration had become a more common phenomenon as the development process accelerated and as pressures resulting from rapid population growth rates mounted. The rising overall migration levels were accompanied by a slight increase in interregional movement over that in the 1955–60 period. Between 1965 and 1970, 46 percent of the moves were between regions, compared with 43 percent for 1955–60.

The level of in-migration was substantially higher in Bangkok than in the other regions during 1965–70, but the gap with the Central region had narrowed since 1955–60. In 1970 almost 300,000 Bangkok residents reported that they had moved to the capital since 1965. They constituted 11 percent of Bangkok's population, well above the 7 percent of recent in-migrants in the capital's 1960 population. The Central region's five-year migrants increased to 7 percent (up from only 4 percent in 1955–60), almost half of whom came from outside the region. This increase may reflect in part the growing metropolitanization of Bangkok, so that the capital's functional population overflowed into the adjoining provinces of the Central region.

The percentage of migrants in the other three regions varied minimally, between 4.4 and 5.0 percent, with the Northeast continuing to have the lowest proportion. Yet, in each of these regions, the percentages were at least 50 percent higher than they had been in 1960. The data also indicate that in the Central region and the Northeast, more migrants came from outside the region in 1965–70 than in 1955–60, the proportion rising from 41.0 to 45.6 percent in the Central region and from 12.6 to 23.3 in the Northeast. The increase for the Northeast is particularly noteworthy; it suggests that economic change in this least developed part of Thailand was stimulating movement to the region in the years immediately preceding 1970. Some of these changes were undoubtedly related to the Northeast's role as a base for U.S. military operations in Vietnam. The fourfold increase in the absolute number of recent migrants, from 26,000 to over 100,000, lends weight to such a conclusion. As in 1960, greater homogeneity existed among the regions in the levels of intraregional movement than in the levels of interregional migration.

The pattern changed during 1975–80. Even though the population of ages 5 and over increased from 28.7 in 1970 to 39.4 million persons in 1980, the number of persons who changed their province of residence between 1975 and 1980 (1,613,000 persons) declined slightly compared with the movement of 1,675,000 persons during 1965–70. Hence in 1980, 4.1 percent of the populaton were classified as recent migrants, a level considerably below

the 5.9 percent for 1965–70 but still above the 3.6 percent of the 1955–60 level. The overall decrease in recent migration for 1975–80 reflects, particularly, a decline of movement within regions from 905,000 to 755,000 persons. During the same interval, the volume of interregional movement rose from 770,000 to 858,000. For the first time, therefore, the evidence available from the decennial censuses indicates there was more interregional than intraregional migration. In 1980 only 46.8 percent of all interprovincial recent migrants had moved within the regions, whereas 53.2 percent had moved between regions. This pattern continued a new trend already indicated by the 1970 data.

Together, these data from the censuses suggest that the Thai population of ages 5 and over on the whole made fewer provincial moves between 1975–80 than during the five-year period preceding the previous census, a decline due to fewer reported intraregional moves. In part, this change may reflect the fact that the most dramatic economic and social changes in Thailand had occurred during the 1960s, even though the pace of development continued into the 1970s. The increase in longer-distance movement during 1975–80 also suggests that the level of national development by then favored long-distance rather than short-distance permanent migration as a form of adjustment to job opportunities and resources. Such movement may have been facilitated in part by improvements in transportation routes between the regions and by better communications. The increasing educational levels of the Thai population concurrently may have made them more receptive to information about opportunities in distant locations. The relative reduction in short-distance permanent migration may reflect a greater reliance on temporary movement, both circular migration and commuting, as a response to rural pressures, to easier accessibility to urban places, and to growing opportunities in provincial municipal areas. Fuller assessment of the reasons for the changing patterns must therefore include attention to the rural–urban movement that took place within the provinces themselves. Attention will be given to that movement in a later section of this paper.

The lower level of recent interprovincial migration characterizing Thailand as a whole in 1980 (4.1 percent compared with 5.9 percent in 1970) occurred in the capital as well as the regions; for some regions the decline was substantial. For the Northeast, in fact, the reported migration level was even lower than in 1955–60, although it disproportionally reflects declines in the levels of movement between regions. Yet, even at these lower levels, in 1980 Bangkok continued to have the highest percentage of recent migrants (8 percent). That the rise of about 40,000 in the absolute number of in-migrants did not result in a proportionally higher level indicates the substantial increases between censuses in the population both of Thailand as

a whole and of Bangkok, and suggests that the pace of movement to the capital had slowed in the ten-year interval. As in previous decades, the Central region contained more migrants than the other three regions. Moreover, 1975–80 saw a continuation of the pattern noted in 1965–70: a narrowing between Bangkok and the Central region in the percentage of migrants in their populations, suggesting a continuing population overflow from Bangkok to the adjoining provinces and movement directly to those provinces by individuals who would otherwise have gone to the capital. The Northeast remained by far the least attractive region of the country, whereas only small differences continued to distinguish the North and the South.

For all regions of Thailand, intraregional migration in 1975–80 was below that of the preceding decade, and for all but the South the differences were substantial. For the Northeast, the percentage of such migration was even substantially below that reported for 1955–60. Overall, the 1975–80 data also point to a decline in the absolute amount of movement between provinces within the same region. In 1975–80 the levels of movement between regions were lower than in 1965–70 for Bangkok and all regions except the Central one, but the declines were not so dramatic; only in the North and Northeast did they involve decreases in the absolute number of interregional migrants. As a net result of these different degrees of change in intra- and interregional migration, for three of the four regions interregional migration constituted a higher percentage of all interprovincial migration in 1980 than in 1970. The change was particularly pronounced for the Central region, which for the first time in the three decades showed a majority of its migrants coming from other regions. By contrast, fewer than 30 percent of the migrants in the South and Northeast came from other regions, maintaining the pattern of high intraregional movement that characterized these regions in the preceding two decades.

THE RELATION OF FIVE-YEAR TO LIFETIME MIGRATION

As noted earlier, the measures of lifetime and recent migration are based on responses to different census questions, each of which has its own strengths and limitations. An individual classified as a recent migrant is not necessarily classified as a lifetime migrant since the recent move may have been a return to the province of birth; the individual would then be living in the province of birth and therefore classified as a lifetime nonmigrant. Only through cross-tabulations of the lifetime and five-year migration data by origin and destination of each move can the extent of return migration be ascertained.

Such tabulations again suggest a high degree of stability among the Thai population, judged by interprovincial movement (Table 4). Of the 1970

Table 4. Recent and lifetime migration compared: 1970 and 1980

Type of migrant	1970		1980	
	Total population	Recent migrants	Total population	Recent migrants
Not recent migrants				
Living in province of birth	84.8	na	85.4	na
Living in other province	8.1	na	1.0	na
Recent migrants				
Moved from province of birth	3.8	72.0	2.8	60.9
Moved to province of birth	0.5	9.6	1.0	21.2
Moved between other provinces	1.0	18.4	0.8	17.9
Total %	100.0	100.0	100.0	100.0

Source: Thailand, National Statistical Office (1973, 1983b).

Note: Tabulations include only those migrants for whom provinces of origin and destination are known.

na—not applicable.

population 5 years of age and over, 84.8 percent were living in their province of birth and had not moved between provinces in the five years between 1965 and 1970. An additional 8.1 percent were living in a province different from that in which they had been born, but had not moved since 1965. By 1980 the corresponding percentages were 85.4 and 1.0. The percentage of persons living in their province of birth at least five years thus remained quite stable. The percentage of long-time residents in a province other than that of birth declined sharply, however, between 1970 and 1980, suggesting either further movement to yet another province or a return to the province of birth during 1975–80. Insights into these possible patterns are provided by tabulating the data for recent migrants only.

The censuses also ascertained, for those who had moved in the respective preceding five years, whether the most recent move was from or to the province of birth or between two other provinces. Although it is not possible to know with certainty that the movement from the province of birth was the first migration rather than one of a series of circulatory moves, for the majority of the population it was most likely the former. Such primary moves were the most prevalent for recent migrants in both 1965–70 and 1975–80, but considerably more so in the earlier period; 72.0 percent of recent migrants came from their province of birth during 1965–70, compared with only 60.9 percent a decade later. Particularly noteworthy, therefore, is the substantial increase in repeat migration. During 1965–70, 28.0 percent of recent migrants had made at least one previous move. A decade later 39.1 percent had done so.

Repeat migration involving onward movement between provinces, neither of which was the province of birth, was very similar (about 18 percent) in the two periods. Most striking is the sharp increase in the percentage of return migrants—those migrating to their province of birth. Return migration characterized only 9.6 percent of 1965–70 recent migrants but 21.2 percent of the 1975–80 group, involving some 366,000 persons. Thus, whereas about one-third of those who made a repeat move between 1965 and 1970 had returned to their province of birth, just over half of all repeat movement between 1975 and 1980 was a return to the province of birth. These data strongly suggest, therefore, a growing volume and higher rates of return migration and possibly circular migration.

The data do not indicate the reasons for the dramatic change. Quite likely, a considerable part of the return and repeat movement reflects the inability of urban areas, especially Bangkok, to provide the employment opportunities required by the growth of the labor force through maturation of the young population and through in-migration. Faced with unemployment or underemployment, migrants to these urban centers may opt to return to their places of origin or try yet another location. Additionally, by the mid-1970s government development efforts in some rural areas may have been successful enough to attract migrants who were only marginally viable in previous destinations back to their place of origin; others may have been drawn to rural areas opened for development in the early part of the decade. Improved transportation networks may be making circulation a more feasible alternative to long-term migration, so that rural residents can opt to leave their home villages periodically on a temporary basis whenever economic opportunities arise elsewhere. Such a strategy is particularly attractive to risk-averse individuals and families.

That many migrants (at least among those to Bangkok) are not certain about the duration of their stay at the destination is documented by the 1983 Survey of Migration in Bangkok Metropolis, Nonthaburi, Pathum Thani, and Samut Prakan (Thailand, National Statistical Office 1983a). Among persons who had arrived in the capital and the three surrounding provinces between November 1980 and October 1982, only 3.5 percent stated that they expected to stay less than one year, but almost two-thirds did not know how long they would remain (Thailand, National Statistical Office 1983a: Table 15). The tenuous nature of these migrants' stay in the capital city area is further documented by the statistics on registration: Only 23.5 percent of the migrants registered their moves (Thailand, National Statistical Office 1983a: Table 26). Although these data are not comparable to the census data because the survey refers to a different time span and covers all migrants to the area, including seasonal migrants, the survey provides important insights into the patterns suggested by the census analysis. The

Table 5. Five-year migration as a percentage of lifetime migration, by region: 1960, 1970, 1980

Region	1960	1970	1980
Whole kingdom	28.6	37.3	25.7
Bangkok	27.0	35.7	26.9
Central	33.2	42.0	29.1
North	25.1	33.4	21.5
Northeast	26.9	35.9	21.4
South	33.7	40.9	32.7

findings also have important implications for policy and deserve much fuller exploration.

Relating the overall volume of five-year migration to the volume of lifetime migration for each region of Thailand for each census year can yield further insights into the relative prominence of each (Table 5). The kingdom as a whole experienced a rise of about one-third in the ratio between recent and lifetime migration from 1960 to 1970, followed by an even greater decline by 1980. In fact, the 1980 ratio was below that of 1960. Basically the same pattern characterized Bangkok and the four regions of Thailand. These data point to lower migration levels in the most recent decade, suggesting that the achievements in development coupled with some reduction in population pressures resulting from wider acceptance and use of contraception have changed the extent to which individuals turn to migration as a means of improving their socioeconomic well-being.

FIVE-YEAR INTERREGIONAL MIGRATION STREAMS

Because the data on five-year migration are tabulated by regions of origin and destination, attention in the following discussion will focus on the recent (five-year) interregional migration streams in each of the census periods. It must be stressed, however, that for all regions, except the Central one in 1980, interprovincial migration within regions constitutes by far the largest single migration category, reflecting the tendency of the migration volume to vary inversely with distance.

As with migration patterns elsewhere, every migration stream has its counterstream. To some extent counterstreams reflect return migration. As earlier analysis has suggested, however, return migration constitutes only a small, though growing, percentage of interprovincial movement in Thailand. Counterstreams therefore largely reflect individual migrants' preferences and perceptions, based on their own characteristics and needs.

As a result, what attracts one person to a given location may be the very factor that stimulates another person to leave the place.

Gross migration levels

According to the 1960, 1970, and 1980 censuses, Bangkok gained more recent in-migrants from the Central region than from any other region of Thailand, a development that reflects the close social and economic integration between the capital and its adjoining provinces as well as their geographic proximity (Table 6). The economically depressed Northeast was the second largest source of migrants for the capital, but until 1975–80 their number was substantially below that from the Central region. By 1980 the difference in the number of recent migrants to Bangkok from the Northeast and from the Central region had narrowed, reflecting the combined effects of a reduction between 1965–70 and 1975–80 in the volume of movement from the Central region and a virtual doubling in the amount of movement from the Northeast. The North and the South also sent increasingly more migrants to Bangkok in each intercensal period, but the increases were proportionally much smaller for 1975–80 than they were for the Northeast. These changes point to the increasing pressure for movement out of the Northeast as well as to the continuing attractiveness of Bangkok to migrants.

As early as 1955–60 the Central region had become the goal for a considerable number of migrants from the capital. The 40,000 persons reported as moving to the Central region from Bangkok far exceeded the next largest stream, 25,860 persons from the Northeast. The predominance of Bangkok as the origin of the largest migration stream to the Central region continued through the 1960s and 1970s. Each succeeding period saw a narrowing difference, however, in the volume of migrants originating from Bangkok and from the Northeast. Whereas the latter stream was only about 62 percent as great as the movement from Bangkok in 1955–60, it reached 83 percent of the Bangkok-to-Central region movement in 1975–80. Again, the rising volume of out-migration from the Northeast and the increasing attractiveness of provinces adjoining Bangkok in the Central region are documented.

In 1955–60, with only two exceptions, the streams of movement to the North, the Northeast, and the South from each of the other regions were small compared with movements to Bangkok and the Central region; they exceeded 20,000 persons only for movement to the North from the Central region and the Northeast. The basic patterns in the direction of interchange remained similar for 1965–70, although the volume of movement between regions increased for most streams, and for some the changes were quite dramatic. For example, with the exception of movement from the South, the flow of people from each region to the North roughly doubled between

Table 6. Interprovincial recent migration streams, by region: 1955–60, 1965–70, 1975–80

Current residence	Total interprovincial migrants	Region of previous residence				
		Bangkok	Central	North	Northeast	South
1955–60						
Bangkok	131,370	—	81,214	13,947	26,745	9,464
Central	210,211	40,006	123,762	15,560	25,860	5,023
North	156,721	8,900	30,270	90,702	26,002	847
Northeast	206,149	8,890	10,758	4,896	180,353	1,252
South	84,555	6,529	10,850	1,482	6,998	58,696
1965–70						
Bangkok	298,791	—	166,181	36,555	66,813	29,242
Central	456,081	82,823	248,103	47,231	62,936	14,988
North	315,734	14,646	58,035	195,703	43,920	3,430
Northeast	430,668	23,592	45,646	26,130	330,486	4,814
South	173,730	8,867	18,486	3,775	11,519	131,083
1975–80						
Bangkok	340,792	—	144,397	43,178	119,661	33,556
Central	502,869	115,355	218,084	53,727	95,890	19,813
North	269,827	20,945	38,746	165,972[a]	40,558	3,606
Northeast	314,910	20,059	32,142	17,438	241,034[a]	4,237
South	183,642	14,033	20,046	7,225	12,582	129,756

Sources: 1955–60 data from Thailand, National Statistical Office (1976: table 19) and Goldstein (1977); 1965–70 and 1975–80 data from Thailand, National Statistical Office (1973, 1983b).

a. Adjusted for movement between provinces split into two provinces during the period 1970–80. Such movement was not considered interprovincial migration.

1955–60 and 1965–70. Movement to the Northeast tripled for the stream from Bangkok and increased fourfold or more from the Central region, the North, and the South. In this particular decade, the Northeast had clearly gained in popularity as a migrant destination even while losing migrants to all regions in larger numbers than it had done a decade before.

These substantial increases in the number of migrants to the North, the Northeast, and the South during 1965–70 did not persist during 1975–80. For many of the streams the volume of movement reported by the census for 1975–80 was lower than that reported for the 1960s. The Northeast replaced the Central region as the largest supplier of migrants to the North; the Central region continued to maintain the distinction it had held since 1955–60 as the major region of origin of migrants to the Northeast and the South. Interestingly, in 1975–80 Bangkok itself took on increased importance as the origin of migrants to the North and the South, and in fact was second only to the Central region in the number of persons it sent to the Northeast and the South. Although some of the migrants from the capital may have been return migrants, many were government personnel or private-sector employees whose jobs were transferred; others probably moved in response to employment opportunities available in the growing urban centers of the various regions and in the development efforts launched in rural areas.

Net migration

As a result of the stream and counterstream movements, the gross exchange between regions far exceeded net recent migration (Table 7), suggesting that migration in Thailand is characterized by low levels of effectiveness as measured by the ratio of net migrants to total interregional migrants. This suggestion is confirmed by the data. The 1955–60 interregional exchange involved some 335,000 persons but resulted in a net exchange of only 109,000, equivalent to an effectiveness index of 32.5 (100 would equal perfect effectiveness). By 1965–70 the 769,000 gross migration between regions yielded a net migration among the regions of 175,000, reflecting a reduction in the effectiveness index to only 22.8. The more widespread movement that characterized this decade evidently was less efficient if judged only by numbers. The lower level of efficiency persisted during 1975–80, when 857,000 interregional migrants of known origin and destination led to a net redistribution of only 220,000 migrants, representing a level of effectiveness indexed at 25.7.

Only Bangkok and the Northeast showed similar patterns of net migration in all three censuses. Bangkok consistently gained in its exchange and did so with each of the other regions; the Northeast showed a consistent loss to each of the regions in each period. In contrast, the Central region

Table 7. Regional net gains and losses from recent migration: 1955–60, 1965–70, 1975–80

Region of current residence	Region of previous residence					Total
	Bangkok	Central	North	Northeast	South	
1955–60						
Bangkok	—	+41,208	+5,047	+17,855	+2,935	+67,045
Central	−41,208	—	−14,710	+15,102	−5,827	−46,643
North	−5,047	+14,710	—	+21,106	−635	+30,134
Northeast	−17,855	−15,102	−21,106	—	−5,746	−59,809
South	−2,935	+5,827	+635	+5,746	—	+9,273
1965–70						
Bangkok	—	+83,358	+21,909	+43,221	+20,375	+168,863
Central	−83,358	—	−10,804	+17,290	−3,498	−80,370
North	−21,909	+10,804	—	+17,790	−345	+6,340
Northeast	−43,221	−17,290	−17,790	—	−6,705	−85,006
South	−20,375	+3,498	+345	+6,705	—	−9,827
1975–80						
Bangkok	—	+29,042	+22,233	+99,602	+19,523	+170,400
Central	−29,042	—	+14,981	+63,748	−233	+49,454
North	−22,233	−14,981	—	+23,120	−3,619	−17,713
Northeast	−99,602	−63,748	−23,120	—	−8,345	−194,815
South	−19,523	+233	+3,619	+8,345	—	−7,326

Source: Based on data in Table 6.

was transformed from a region of net loss in 1955–60 and 1965–70 to one of net gain in 1975–80. The North showed a reverse pattern. It gained in both 1955–60 and 1965–70 because its positive exchanges with the Central region and the Northeast were sufficiently large to compensate for the losses to Bangkok and the South; by 1975–80 it was also losing to the Central region and its loss to the South had become accentuated. The South, too, went from a region of gain to one of loss but did so earlier than the North. In 1955–60 it gained in its exchanges with every region except the capital. It continued to do so in 1965–70, but by this time the small gains with the three regions were not sufficient to compensate for the very large increase in the net loss to the capital, from just under 3,000 to over 20,000 persons. This pattern persisted into 1975–80, when a similarly large loss to Bangkok more than wiped out the relatively small gains from the other three regions.

Thus by 1975–80 the overall pattern of internal population redistribution in Thailand had changed considerably from what it had been in 1955–60. Earlier, Bangkok, the North, and the South had all been gainers at the expense of the Central region and the Northeast. Most recently, only Bangkok and the Central region gained and the other three lost population. By far the greatest loss was in the Northeast, where the net loss to Bangkok and the Central region alone accounted for about three-fourths of the gains made by these two areas.

THE LARGEST INTERPROVINCIAL STREAMS

Data for 1965–70 and 1975–80 on the largest interprovincial streams (5,000 migrants and more) further document Thailand's changing migration patterns (Table 8). Although these streams represent only 1 percent of all possible interprovincial streams, they encompass about one-fourth of all interprovincial migrants. In 1965–70 fifty streams contained a minimum of 5,000 people each and together accounted for 419,090 interprovincial migrants (Arnold and Boonpratuang 1976). Of these, 58.6 percent represented intraregional moves involving 245,967 individuals. In that period movement to Bangkok accounted for 28.4 percent of the migrants in the largest streams, and movement out of Bangkok involved only 10.1 percent. Only a small minority of migrants in these streams moved between Thailand's four regions.

By 1975–80 the number of interprovincial streams of at least 5,000 migrants had changed only slightly, declining to forty-eight; the total number of persons involved had also fallen slightly, to 416,771 (Pejaranonda, Goldstein, and Goldstein 1984). Major changes had occurred in the directions of movement, however. Data on the largest streams indicate a substantial decline in intraregional movement. Only 22.7 percent of the migrants in these streams moved between provinces within regions, compared with

Table 8. Regional flows of the largest interprovincial migration streams: 1965–70 and 1975–80

Regional flows	1965–70		1975–80	
	Number of migrants	% distribution	Number of migrants	% distribution
From Bangkok to				
Central	36,213	8.7	77,675	18.6
Northeast	5,905	1.4	5,172	1.2
North	—	—	—	—
South	—	—	—	—
To Bangkok from				
Central	90,644	21.6	109,353	26.2
Northeast	28,354	6.8	97,101	23.3
North	—	—	13,597	3.3
South	—	—	19,363	4.7
Intraregional				
Central	30,739	7.3	5,791	1.4
Northeast	125,804	30.0	54,949	13.2
North	66,768	15.9	10,711	2.6
South	22,656	5.4	23,059	5.5
Other	12,007	2.9	—	—
Total	419,090	100.0	416,771	100.0

Sources: 1965–70 data from Arnold and Boonpratuang (1976); 1975–80 data from Pejaranonda, Goldstein, and Goldstein (1984).

Note: Blank cells indicate that the interprovincial streams in these cases were too small to be included in the largest streams.

58.6 percent a decade earlier. The number of individuals involved correspondingly fell from 245,697 to only 94,510, a decline of over 60 percent. Except for the movement involving Bangkok, none of the largest streams in 1975–80 was between regions.

Paralleling the decline in intraregional movement was a sharp increase in migration to Bangkok. Such movement in 1975–80 encompassed 57.5 percent of the migrants in the forty-eight largest streams, compared with only 28.4 percent a decade earlier, and the absolute number of migrants increased from 118,998 in 1965–70 to 239,414 a decade later. The number of migrants moving out of Bangkok to provinces in the Central region more than doubled and accounted for 18.6 percent of all the migrants in the largest streams, compared with only 9 percent ten years earlier. Moreover, 82 percent of these out-migrants from Bangkok moved to the three provinces—

Nonthaburi, Pathum Thani, and Samut Prakan—considered to be the suburban area of the capital. The data on the largest streams therefore corroborate the suburbanization of areas around Bangkok that was suggested by the overall five-year migration data. That these largest streams do not include streams from other provinces to Bangkok's three suburban provinces suggests that such direct suburbanward movement is quite diffuse. Despite this diffusion, the importance of the cumulative impact is evident in data (not presented here) that indicate that interprovincial migration to the three suburbs increased 26 percent over the decade.

Like the earlier data on five-year migration, these data on the largest interprovincial streams document sharp changes in migration patterns. The shift away from intraregional moves toward more migration to Bangkok suggests that potential migrants perceived or became aware of greater opportunities in the capital than in their own region. As suggested above, however, it is also possible that greater reliance on shorter-distance circulation has made intraregional movement less necessary than in the past.

INTERREGIONAL OUT-MIGRATION PATTERNS

The interregional data can also be used to determine the percentage of a region's censal population consisting of out-migrants. (The comparison is necessarily crude in the absence of more accurate data on the population of the region at the beginning of the five-year interval to which the out-migration refers.) When this is done, the patterns identified and the changes over time corroborate the findings based on in-migration and net migration presented earlier (Table 9).

In absolute numbers the Central region had the largest out-migration stream in 1955–60 and 1965–70, reflecting the heavy movement to Bangkok from its surrounding provinces. The numbers continued to be high in 1975–80, but the Central region was surpassed by the Northeast as the region of heaviest out-migration. Bangkok, despite its great attraction as a migrant destination, also had a large number of out-migrants in each period, surpassing both the North and the South. If out-migration is expressed as a percentage of the region's total population, Bangkok had the highest out-migration level, a function in part of its overall smaller population size. The Central region had the next highest level, and the South had the lowest level in each period.

Over time the patterns of change in the level of out-migration by region largely paralleled that of in-migration. Between 1955–60 and 1965–70 each region and Bangkok experienced a rise in the percentage of out-migrants. The relative change was particularly sharp for the North and South, where percentages more than doubled and where the absolute number of out-

Table 9. Interregional out-migration, by region: 1955–60, 1965–70, 1975–80 (Numbers in thousands)

Region	1955–60		1965–70		1975–80	
	Number	% of total population	Number	% of total population	Number	% of total population
Bangkok	64	3.6	130	4.8	171	4.0
Central	133	2.6	288	4.5	235	2.7
North	36	0.8	114	1.8	122	1.5
Northeast	86	1.1	185	1.9	269	2.0
South	17	0.6	52	1.5	61	1.2
Whole kingdom	335	1.5	770	2.7	858	2.2

Source: Based on data in Table 6.

migrants tripled, compared with a doubling in the other regions and Bangkok. During the following decade, however, the percentage of out-migrants declined in each region except the Northeast, where it remained constant. Only the Northeast and Bangkok experienced a substantial increase in the absolute number of out-migrants. The Central region had fewer out-migrants in 1975–80 than in 1965–70, and its level of out-migration actually declined to about its 1955–60 level.

URBAN AND RURAL MOVEMENTS

Urban growth

In discussing migration in relation to urban growth, municipal areas will be used to denote urban. Such a procedure may be misleading, however, because the number of areas so designated has changed minimally since they were established in the 1930s and 1940s—from 116 then to 119 now. Since then, the municipal areas themselves have grown considerably in size: In 1947, 95 percent of these urban places were populated by fewer than 20,000 people; by 1979 only half were (Thailand, National Statistical Office 1984: Table 29). In addition, other locations in Thailand, not classified as municipal areas, have taken on the characteristics of urban places, especially those localities designated as "sanitary districts."[4] (For a fuller discussion of these definitional issues, see Robinson and Wongbuddha 1980

4. Locations are designated as sanitary districts on the basis of such diverse criteria as density, annual income, and being a district headquarters; many are on the fringes of municipal areas and are suburban in character.

and Goldstein and Goldstein 1978.) Since most available census publications do not tabulate sanitary districts separately, the term urban here will be restricted to municipal areas. To insure comparability over time, we treat Bangkok (Phra Nakhon and Thonburi Provinces) separately from the Central region, where it is often included in 1960 and 1970 published census tabulations.

As defined by the proportion of total population living in municipal areas, the urbanization level in Thailand increased from 9.9 percent in 1947 to 12.5 in 1960, 13.2 in 1970, and 17.6 in 1980. By 1980, despite these increases, the level of urbanization was still well below that characterizing Southeast Asia as a whole (23 percent) and below that of developing countries generally (31 percent), according to the United Nations (1982). Yet equally noteworthy is the consistent rise in the urbanization level since 1947 and the particularly accelerated urbanization tempo in the decade 1970–80. The urban growth rate of 5.3 in the 1970s far exceeded the 2.1 rate of rural areas, and it represented a considerable increase over the 3.4 urban growth rate in the 1960s (ESCAP 1982:25).

A substantial part of the increase in the 1970s was a function of areal annexation, however. Urban growth attributable to natural increase and migration is estimated to have increased from 1.7 million in the 1960s to about 2 million in the 1970s, while that attributable to areal annexation increased from 120,000 to 823,000. The contribution of areal annexation to urban population growth was therefore raised from only 6.5 percent in the 1960s to almost 30 percent in the 1970s. By contrast, the contribution of natural increase declined from just half to 41 percent, and that of net migration from 44 to about 30 percent. The important role of annexation in urban growth during the 1970s reflected in large measure the designation of the Bangkok Metropolitan Area as encompassing the entire two provinces in which the twin cities of Thonburi and Bangkok are located. About four-fifths of the capital's population growth in that period was therefore attributable to annexation, which, in turn, accounted for about one-fourth of total urban growth in Thailand as a whole during the decade. Without this change in boundaries, the distribution of the components of urban growth in the 1970s would have closely paralleled that of the 1960s (ESCAP 1982:30), and the growth rates and urbanization tempo would have been more similar to those of the 1960s.

In virtually all discussions of the role of big cities in urban and economic development, Bangkok emerges as a leading example of a primate city. In most rankings of primate cities it appears first whether measured by the size of its population in relation to the next largest city in the country or judged by the proportion that its population constitutes of the total population of the four leading cities. The evidence clearly indicates more,

rather than less, concentration of population resulting from interregional migration in and around Bangkok during the twenty-five years from 1955 to 1980. The increasing concentration is evident even if Bangkok alone is considered. In 1960 Bangkok contained 51.9 percent of Thailand's urban population; by 1970 the percentage had risen to 54.8, and by 1980 to 61.1 percent.

By contrast, the urbanization level has been low in all regions at each census date. The highest levels are found in the South, the lowest in the Northeast. The South in 1960 was (and still is) the only region with as much as 10 percent of its population living in urban places; the percentage had increased to 12.6 by 1980 (Table 1). This 1980 urbanization level was almost three times greater than that of the Northeast, where the percentage urban increased only from 3.5 to 4.0 percent during the twenty-year interval. Nor did the North change its level very much (from 6.4 to 7.5 percent). The faster urban development in the South reflects the increased role of the region's urban centers as transportation and commercial hubs serving the rich agricultural areas as well as its tin and fishing industries. The development of a new international airport at Hat Yai and improvements in the highway system on this main route to Malaysia and Singapore are contributing factors. The minimal change in the Central region is partly related to the proximity of Bangkok and the capital's dominance in the region's (as well as the nation's) urban structure. In the North and Northeast, urbanization is occurring more slowly, partly because the rural population also continues to increase.

Urbanization has permeated all of Thailand's regions, nonetheless, even though at a low level. Moreover, as indexed by the nation's ten largest urban places, some equalization in urban distribution occurred between 1960 and 1980. In 1960 three of the ten largest cities were in the Central region, four in the North, two in the South, and one in the Northeast. By 1980, however, only Bangkok Metropolis represented the Central region in the distribution; each of the other three regions had three places among the top ten. Thus, although the levels of urbanization had not changed substantially in the twenty-year period, the greater spread of Thailand's leading cities among the regions does point to some weakening in the unbalanced distribution of urbanization.

Rural–urban migration

Both the 1970 and the 1980 censuses collected information on rural–urban migration in Thailand, including movement within provinces (Table 10). In 1970, 11.6 percent of the population were classified as migrants on the basis of a change in locality, in contrast to the 5.9 percent who were so identified when a change in province of residence served as the definition of

Table 10. Urban-rural recent migration streams: 1965–70 and 1975–80

Item	1965–70		1975–80	
	Number	%	Number	%
Population, ages 5 and over				
Nonmigrants	25,405,300	88.4	36,432,552	92.6
Migrants	3,331,100	11.6	2,947,700	7.4
Total population	28,736,400	100.0	39,380,252	100.0
Migrants				
Rural-rural	2,086,700	62.6	1,532,900	52.0
Rural-to-urban	348,000	10.5	420,600	14.3
Urban-to-rural	180,400	5.4	278,300	9.4
Urban-urban	297,000	8.9	506,000	17.2
Stream unknown	419,000	12.6	209,900	7.1
Total migrants	3,331,100	100.0	2,947,700	100.0

Sources: 1965–70 data from Arnold and Boonpratuang (1976); 1975–80 data from tabulations of the 1 percent sample tape of the 1980 Census of Thailand (Pejaranonda, Goldstein, and Goldstein 1984).

Note: Data for 1955–60 are not available for rural or urban origin and destination.

migration. This difference points to a much higher degree of population movement in Thailand than the data on interprovincial migration indicate.

As in other developing countries, most of the internal migration from one locality to another reported between 1965 and 1970 involved moves from one rural place to another; just over 60 percent of the 3.3 million migrants changed residence between rural locations. The rural-to-urban migration stream, on which most attention usually focuses, was much smaller. Between 1965 and 1970 only 10.5 percent of all migrants moved from rural to urban locations; this percentage may be a slight understatement since an additional 3.6 percent of all 1970 urban-resident migrants did not indicate whether they had come from a rural or an urban place. The numbers of rural-to-urban migrants may also be underenumerated because those who migrated to the large sanitary districts and suburban locations—areas that have taken on an urban character but are still classified as rural—were counted as rural-to-rural, rather than rural-to-urban, migrants (ESCAP 1982). Even when these considerations are taken into account, the number and percentage of rural-to-urban migrants is substantially below the rural-to-rural stream, pointing to the importance of movement between rural places in the economic and familial adjustments of rural residents.

Although the rural-to-urban stream is small relative to the rural-to-rural flow, the numbers are great in relation to the urban population, and such migrants play an important role in urban growth. As already noted, dur-

ing 1960–70 net migration accounted for about 44 percent of all urban growth in Thailand, and the contribution would be even greater if the children born to those migrants were attributed to migration rather than to natural increase. Thus even a small increase in the absolute number of migrants from rural to urban places can have a substantial impact on the size of the urban population and on particular urban places if that flow is narrowly channeled.

As a reflection of the growing numbers of persons in urban places and the fact that some urban residents also migrate, the 297,000 individuals reported as moving between urban places during 1965–70 (about 9 percent of all migrants) almost equaled the rural-to-urban flow. With the increasing number of residents in urban places and the growing interaction among urban places, this particular migration flow will likely become more important in Thailand, as it has in other developing countries.

Another noteworthy stream, often overlooked in migration analysis, is the urban-to-rural stream. Some 180,000 persons in Thailand moved from an urban to a rural place between 1965 and 1970, accounting for 5 percent of the total migration flow and just over half of the rural-urban migration. Since a substantial percentage of the flow was likely to have been return migration (Goldstein, Pitaktepsombati, and Goldstein 1976:131–35), it emphasizes the stream and counterstream character of population movement in Thailand. The size of this stream also suggests that the demographic impact of rural-to-urban movements may be mitigated by a return movement over a short period. Much more careful attention is warranted to such movement as a factor that affects not only the demographic but also the social and economic conditions in the rural origins and the temporary urban destinations.

As indicated above, fewer five-year interprovincial migrants were identified in 1975–80 than in 1965–70. A similar decline is found to have occurred when migration is defined by place of residence. Despite an increase between 1970 and 1980 of just over 10 million persons in the Thai population of ages 5 and over, the number of persons moving between localities in the five years preceding the 1980 census dropped to 2.95 million from 3.33 million in 1965–70. The overall migration level concomitantly fell from 11.6 percent to only 7.4 percent.

Examination of the individual migration streams indicates that all of the decline occurred in the rural-to-rural migration stream and, for those migrants who were rural residents, with rural or urban origin unknown. In contrast to the 2.1 million persons who moved between rural places in 1965–70, only 1.5 million reported such moves in 1975–80, reducing their proportion of all migrants from 63 to only 52 percent. Each of the other migration streams grew.

Several explanations may underlie these patterns of change. To the extent that less and less rural land is available for settlement, and to the degree that rural development efforts *in situ* have met with some success, less opportunity or incentive may exist for the rural population to move from one rural location to another. The decline may also be in part a function of the success of the family planning program in rural Thailand, especially in the North, where lower fertility has somewhat lessened population pressures on limited resources.

Another factor contributing to the decline in rural–rural migration may be the increased importance of international labor migration from Thailand, especially in the second half of the 1970s. By 1980 an estimated 98,000 labor migrants had gone abroad, most of them to the Middle East (Piampiti 1985:9). These migrants, primarily men from rural areas, may very well be substituting international migration for rural-to-rural movement. The remittances they send to their villages are instrumental in providing a better standard of living for the families left behind; they fund land purchases, construction of better housing, and education for children. At the same time, the modern household goods the migrants bring home with them during their annual home leave also improve village life. All of these factors may lessen the desirability of moving from the village to another rural location. How long such international labor migration will remain an alternative to internal movement will depend, of course, on factors in the economies of the Persian Gulf states, especially the price of oil on the international market.

Nevertheless, the rising size of urban places and the attractions they offer, coupled with the incentives to leave the village, account for the continuing movement from rural to urban places. Yet, this flow, which accounted for 14 percent of all moves in 1975–80 compared with 10 percent in 1965–70, increased less than expected on the basis of the overall growth of Thailand's rural population. Development in rural areas and the sizable international labor migration may help to explain this somewhat attenuated migration stream. The deteriorating employment situation in Bangkok may be another factor in the decrease of rural-to-urban migration.

Far more substantial changes occurred in both the urban–urban and the urban–rural flow. Migration between urban places was 70 percent greater in 1975–80 than in 1965–70; it accounted for 17 percent of all 1975–80 migration, compared with only 9 percent in the previous period. By 1975–80 it even exceeded the rural-to-urban flow in size. Not surprisingly, as urbanization levels rose in all regions of the nation, even while Bangkok remained the leading magnet for migrants, the interchange among urban places became accentuated. The change was in part a function of the growing numbers of government officials transferred from one urban location to another

as the size and importance of such places increased. Most likely, it reflected both the growing number of urban residents who perceived better opportunities in other urban locations and the increasing movement between Bangkok and its suburbs.

At the same time, the growing levels of urbanization in Thailand provide an ever increasing reservoir of city residents who may migrate to rural places. The cumulative number of migrants from rural to urban places also creates a reservoir for potential return migrants to their rural origins. For 1980 the urban-to-rural stream had risen by about 100,000 to 9.4 percent of all five-year migrants in Thailand, compared to the 5.4 percent it constituted in 1970.

A fuller assessment of these various streams within a regional context is precluded by various limitations of the published data. On a regional basis, no cross-tabulations are available on the rural or urban character of places of origin and destination, or on the extent of repeat and return movement. Additionally, some rural-to-urban movement is masked because of the misclassification of places under the official Thai designation of urban places. If this misclassification occurs differentially by region, it could affect comparability. These shortcomings argue for a refinement of the official statistical data collection and tabulation procedures as well as for special studies directed at these problems. The absence, to date, of data on rural-urban migration for the specific regions also precludes comprehensive assessment of the relation between migration and urbanization in Thailand.

REASONS FOR MIGRATION

A major innovation in the 1980 census was the inclusion of a question to ascertain from all five-year migrants the reasons for their move. Data based on this question provide some insights into how actual or perceived development opportunities affect migration. They indicate that economic considerations constituted an important motivating factor in all migration streams, especially among male rural-to-urban migrants, most of whose moves were motivated by the search for work (Table 11). By contrast, for those male urban–urban migrants who cited economic reasons for the move, one-third moved because of job transfers, which were also an important reason for male urban-to-rural movement—more so than to find work. Economic reasons, and especially job transfers, were of lesser importance to women migrants in all streams, except those moving from rural to urban places. These data suggest that, whereas rural-to-urban migrants move to cities in search of the greater economic opportunities they perceive to exist there, migrants moving from urban places to rural locations more generally do so only if a job is guaranteed in advance at their destination, such

Table 11. Reasons for migration, by urban–rural stream and by sex: 1975–80 (Percentage distribution)

Sex and reason for migration	Migration stream			
	Rural–rural	Rural-to-urban	Urban-to-rural	Urban–urban
MALES				
Economic				
Looking for work	27.5	49.7	21.0	24.6
Job transfer	6.4	7.2	21.7	13.9
Other	2.7	3.8	2.0	3.1
Education	3.4	10.7	2.9	9.7
Family-related				
Change in marital status	18.0	2.6	7.3	1.9
To accompany person in household	30.3	14.8	30.5	29.0
Other[a]	9.3	5.0	11.9	12.5
Unknown	2.5	6.3	2.8	5.3
All reasons	100.0	100.0	100.0	100.0
FEMALES				
Economic				
Looking for work	16.5	39.4	11.4	16.3
Job transfer	1.9	1.7	6.7	3.1
Other	1.8	2.8	1.1	3.1
Education	1.7	13.5	3.4	12.4
Family-related				
Change in marital status	12.2	4.8	6.9	5.2
To accompany person in household	59.3	33.1	59.6	49.3
Other[a]	4.3	2.0	9.2	6.1
Unknown	2.3	2.8	1.6	4.4
All reasons	100.0	100.0	100.0	100.0

Source: Pejaranonda, Goldstein, and Goldstein (1984).

a. Includes joining family member, returning home, and going to another residence.

as in the case of job transfers. In many instances, of course, the latter migrants may actually be required to move by their employers.

Urban places were also centers of attraction for persons seeking education, regardless of their rural or urban origin. Partly reflecting the increasing participation of women in secondary and higher education, more women than men cited education as the reason for their moves to urban places. For these women, the smaller, regional cities may be particularly important destinations. Future analysis of reasons for moving cross-

classified by urban or rural origin and destination and regional residence should help to clarify this possibility.

Moving to accompany someone in the household was an important reason for both men and women in all migration streams, although less so for rural-to-urban migrants. In the other streams about 30 percent of the men and 50 to 60 percent of the women had moved for this reason. Moving because of a change in marital status was more characteristic of rural-rural migrants than of those in other streams. This behavior may reflect the need to move in order to obtain adequate land for the livelihood of a newly established household.

THE RELATION OF MIGRATION TO DEVELOPMENT

In evaluating its population activities during the Fourth National Economic and Social Development Plan Period (1977–81), the Thai government concluded that it had not achieved its goal of promoting policies to reduce migration into the Bangkok Metropolis (Ad Hoc Sub-committee on Population 1981:7–11); nor had it been successful in encouraging migration to other provinces or interregional migration and the development of regional centers to attract rural migrants to slow the migration rate to Bangkok. Policymakers identified several reasons for this failure: Economic pressures continued to encourage migration from less developed to more developed areas. Continued high rates of movement to Bangkok had led to a multitude of social and economic problems, but efforts to cope with them had actually increased the attractiveness of the city to migrants, as well as to private investment. A failure to decentralize the administrative authority to regional and local levels had, in turn, hampered regional and rural development efforts. Regional and rural–urban disparities in income and economic opportunity have thereby continued and may actually have been fostered by these policies; they may continue to stimulate migration to already overburdened areas. In 1981, as in previous decades, the government was therefore forced to conclude that there "is at the present an unequal distribution of population, resulting from the fact that the government has never imposed any limitations on population movement" (Ad Hoc Subcommittee on Population 1981:73).

The report's review of selected indicators of economic well-being corroborates its conclusions and helps to explain the migration patterns noted in this analysis. Low income, correlated with scarcity of resources and few job opportunities, persists in the regions of Thailand to varying degrees. In 1975–76 the Northeast, with an average annual per household income of 17,952 baht,[5] stood in stark contrast to Bangkok with its average of 41,304

5. Twenty baht in 1975–76 were roughly equivalent to US $1.00.

baht. Household income in the North was also low, averaging 18,432 baht, whereas in the South and the Central regions, and especially the latter, better economic conditions were reflected in averages of 21,456 baht and 27,000 baht, respectively.

The differences are even more pronounced when urban and rural residence is considered. For Thailand as a whole, and for each of the regions, municipal household incomes were well above those of units living in sanitary districts; the latter, in turn, were substantially above those of the village households. Moreover, to the extent that household size varied by location and tended to vary inversely with the level of urbanization, the differentials were even sharper if measured on a per capita basis. Thus, in contrast to an income of 8,226 baht per capita for Bangkok's core population, that of the village population in the Northeast (the lowest per capita reported) averaged only 2,615 baht, 68 percent lower.

Paralleling the regional and urban–rural income differentials are differentials in the percentage of the Thai population living below the poverty level. Using a 1975–76 monthly per capita income of 200 baht in urban places and 150 baht in rural places as the standard of poverty, World Bank economists found 25 percent of Thailand's population to be below poverty levels (Lim et al. 1980:62). This percentage differed substantially between rural and urban areas and among the rural areas of the four regions. Only 9 percent of Bangkok's population and 10 to 13 percent of the urban populations in other regions were classified as poor. By contrast, the level in the rural areas of the four regions varied considerably. The Central region's rural poverty level was lowest (12 percent) and similar to the level of its urban areas. Poverty levels in the rural areas of the South and North were intermediary, at 26 and 28 percent, respectively. As with most other development indicators, poverty was highest in the Northeast, where 38 percent of the rural population lived below the poverty line. In fact, while accounting for only 39 percent of Thailand's rural population, the Northeast had 52 percent of Thailand's rural poor.

Although local conditions undoubtedly affect the poverty levels, a series of common factors have also been identified ("Strategy for rural development" 1982). These include the depressed prices received by farmers as a result of the monopolistic market at the wholesale and export levels and the large number of middlemen; neglect of backward areas as production is increased through heavier reliance on the amount of land under cultivation rather than improvement in methods of production; the relatively small investment in rural development; and continued population growth, which, although at reduced rates, still exceeds job creation and leads to excessive exploitation of resources. Despite the efforts over the course of four development plans (1961–81) to achieve higher economic growth rates, the net result

seems to have been unbalanced growth, favoring manufacturing, trade, and services rather than agriculture.

Contributing to the unbalanced growth and generally reinforcing the basic population redistribution patterns of earlier periods was the tendency to direct rural development projects to areas already characterized by better growth potential. The data showing average investment of development funds in the third Five-Year Plan (1972-76) is illustrative (Cochrane 1979:62). The Northeast received an average investment of 1,519 baht per capita, the lowest investment of all regions. Bangkok's average of 3,815 baht was over twice as high and far exceeded that of the other three regions as well, which received only between 1,761 (North and Central) and 1,983 (South) baht per capita on average.

Given the regional and urban–rural differences in income, the substantial out-migration from the Northeast and the attraction of Bangkok is easily understood, as is the need of the rural population to seek better opportunities in other rural places and in urban locations. Indeed, with differentials as sharp as these, perhaps what is surprising is that migration does not occur with greater frequency and that there is substantial movement to areas characterized by poor conditions. Apparently, not only economic factors stimulate migration; some opportunities seem to attract individuals with given credentials or socioeconomic characteristics even to such poorer areas. Research on the noneconomic factors affecting both stability and migration is much needed here.

Population growth due to high rates of natural increase may also create pressure on resources and thereby stimulate out-migration. Comparison of regional rates of natural increase shows increasing divergence between 1964/65 and 1974/75 (Thailand National Statistical Office 1978). In the mid-1960s the annual rates in each region hovered about the national average of 3.13 percent, ranging only between 2.93 in the Central region (including Bangkok) and 3.23 in the South. By 1974/75, natural increase ranged from a low of 1.63 in the North to a high of 3.50 in the Northeast. The startling change in the North was due to a sharp drop in its birth rate, from 43.5 to 26.6 during the decade. In the same period the birth rate rose slightly in the Northeast from 43.5 to 45.0, and in the South from 40.7 to 41.4. The net effect of these changes was to maintain population pressure in the Northeast, both through sheer numbers and because a high percentage of its population was in younger age groups. These changes may help to explain the continuing high exodus from the Northeast throughout the 1960s and into the 1970s, and the reversal of the South from a receiving to a sending area (Cochrane 1979:9).

In evaluating the migration patterns revealed by the 1960 and 1970 census data, the World Bank observed that although the population of Thailand

is not very mobile, a substantial increase in mobility occurred between 1955–60 and 1965–70 and that "migration theory suggests that it will continue to increase as economic development progresses" (Cochrane 1979:33; see also Caldwell 1967). The 1975–80 data suggest that this prediction has not come true. In contrast to the 5.9 percent level of interprovincial migration in 1965–70 (over 50 percent greater than the 1955–60 rate), that of 1975–80 was only 4.1, representing a substantial decline if the data are accepted as correct. Moreover, intraregional migration declined in each region, and interregional migration declined for all but one; only the Central region maintained its earlier level.

Between 1965–70 and 1975–80, the absolute numbers of five-year migrants declined as well in three regions but not in Bangkok or the Central region. The capital and the adjoining areas of the Central region apparently maintained their attraction for migrants in Thailand, with the flow to the Central region being accounted for in part by its greater proximity to Bangkok. The Central region grew in importance as the destination of "suburban" out-migrants from the capital as well as of those from other regions who moved directly to the surrounding urban areas instead of to the capital itself.

Although the magnetism of primacy and urbanism account in part for the changing patterns, the increasing scarcity of new land is probably also a key factor—allowing for less movement to other rural places and thereby promoting greater rural stability, or, when movement does occur, generating more movement to urban places. The plausibility of such a conclusion is suggested by an assessment of interprovincial migration during 1965–70 (Cochrane 1979:42). That analysis showed that migration streams in Thailand flowed toward the areas of highest income and available land; and the closer the area was to Bangkok, the greater was the outflow. Increased pressure on land was seen as increasing the flow of migrants, but the direction of migration depended on the availability of rural opportunities. This suggested that improvement in the rural situation could substantially slow movement to the capital, especially if opportunities in Bangkok did not expand considerably.

Nevertheless, some rural development in itself may not be enough to stem urbanward migration; the level of development achieved may also be important. Piampiti's (1985) research based on 1975–80 data, for example, found a negative correlation between per capita income and out-migration only in the provinces in the relatively affluent Central region. In the Northeast, the correlation was positive, suggesting that a minimum income level was necessary for people to afford migration. A limited amount of investment in rural development in the poorest regions of Thailand may therefore result in an effect opposite to that intended: Rather than decreasing

rural-to-urban migration, it may facilitate such movement. Only when a higher level of development is reached, as in the Central region, does additional income help to curb mobility from the province.

Economic changes during this two-decade period have resulted in increasing contributions of manufacturing and services to Thailand's gross domestic product (GDP) and greater diversification in crop production and merchandise commodities and exports. Concurrently, however, the structure of wealth and income distribution has become more concentrated, and rural-urban income differentials have widened, as have regional differentials ("Strategy for Rural Development" 1982). For example, in 1960 Bangkok accounted for 23.8 percent of Thailand's GDP and the Northeast 17 percent. By 1979 Bangkok's share increased to 27.4 percent and that of the Northeast declined to 14.7 percent. The North and South also experienced declines whereas the Central plain, again reflecting its status as a "richer" area and its closer functional ties to Bangkok, increased from 29.3 to 31.2 percent.

These differential patterns are reflected somewhat in changes in per capita income. Between those same years, 1960 and 1979, the per capita income in Bangkok rose by 440 percent, from 5,630 to 30,161 baht. In the Northeast it increased by only 360 percent, from 1,082 to 4,991 baht (still below Bangkok's 1960 average), so that between 1960 and 1979 the Northeast average actually declined from 19.2 to only 16.5 percent of Bangkok's per capita income. The relative increase in the Central region exceeded that of Bangkok, but its 17,655 baht average in 1979, although well above that of the other regions, was still only 58 percent as high as Bangkok's. The North's per capita income, equal to 26.5 percent of Bangkok's in 1960, also increased somewhat faster than Bangkok's, but by 1979 it was still only 29 percent as high as the capital's. Thus for all regions, sharp income differentials with the capital persisted.

To the extent that many regional differentials are closely associated with rural development, it is understandable that Thailand's Fifth Development Plan (1982–86) places strong emphasis on the rural population, especially that in the 216 districts and 30 subdistricts located in 37 provinces in the Northeast, North, and South that have been identified as backward areas (Ad Hoc Sub-committee on Population 1981). These rural areas contain 7.5 million persons (about one-sixth of Thailand's population) and 75 percent of the poverty-stricken populations in the three regions. The plan calls for creation of 3 million rural jobs in the slack season; encouragement of village activities to improve water supplies, fisheries, and cattle banks; improvements in social infrastructure (education, public health, and legal services); and concerted efforts to promote foodstuff production, including restoration of soil fertility.

Various criticisms have been raised against the new rural development strategy ("Strategy for Rural Development" 1982:422), especially with respect to the accuracy of its assessment of the causes of the problems, the choice of target areas, and specific projects to be implemented. Nonetheless, because the new strategy recognizes the basic problems, the attention it gives to reducing rural poverty and enhancing the rural population's ability to help itself could significantly affect the quality of rural life. In so doing, together with continued efforts to lower rural fertility, it may reduce the pressures for rural out-migration. Its success will depend, however, not only on rural changes but also on whether the nation can achieve a more balanced pattern of population distribution and human settlement in relation to resources, national security, and job opportunities. Included in these efforts will be limiting the increase of the Bangkok Metropolis population while encouraging the formation and development of communities in rural areas that are suitable for basic social and economic investment so that these urban areas of low density can provide jobs for a wider population base (Ad Hoc Sub-committee on Population 1981:78-79).

The development indicators discussed here testify to the progress Thailand has made in its efforts to improve its population's living standards. They also document, quite unambiguously, that substantial differences still exist between regions, and that the Northeast, in particular, remains economically the most disadvantaged region in the nation while Bangkok continues to be the dominant center of the kingdom. In view of these conditions, and judged from other developing countries' experiences, the trends in migration characterizing Thailand up to 1970 may have been expected to continue and even to accelerate in the ensuing decade as development continued. That they apparently have not is a major finding of the current research.

These changing patterns thus call for analyses to assess more precisely the relations among the migration streams, social and economic differentials among provinces, and efforts at regional development. Additional tabulations from the sample census tapes will facilitate such analyses. Beyond such further exploitation of census data, new national surveys are needed to ascertain not only the factors leading to a decision to move and the choice of destination but also the reasons for nonmovement, especially among those who may have earlier considered migration. The extent of reliance upon circulation and commuting and how these relate to more permanent migration and to development also need to be explored in greater depth. The decline in migration between the late 1960s and the late 1970s argues strongly for gaining further insights into the reasons and their relation to development efforts and to changing conditions in Thailand's various regions. Such evaluations should be particularly useful for policymakers

as well, providing insights into how the role of migration may change as development proceeds.

REFERENCES

Ad Hoc Sub-committee on Population

1981 *Population Plan, 1982–1986.* Bangkok: National Economic and Social Development Board, Office of the Prime Minister.

Arnold, Fred, and Mathana Phananiramai

1975 *Revised Estimates of the 1970 Population of Thailand.* Research Paper No. 1. Bangkok: National Economic and Social Development Board.

Arnold, Fred, and Supani Boonpratuang

1976 *Migration.* Subject Report No. 2. *1970 Population and Housing Census.* Bangkok: National Statistical Office.

ASEAN Population Programme

1981 *Migration in Relation to Rural Development.* Bangkok: Institute of Population Studies, Chulalongkorn University.

Bose, Ashish

1965 Migration streams in India. In *Contributed Papers, Sydney Conference,* pp. 597–606. Liège: International Union for the Scientific Study of Population.

Caldwell, John C.

1967 The demographic structure. In T.H. Silcock, ed., *Thailand: Social and Economic Studies in Development,* pp. 27–64. Canberra: Australian National University Press.

Chamratrithirong, Aphichat, Krittaya Archavanitkul, and Uraiwan Kanungsukkasem

1979 *Recent Migrants in Bangkok Metropolis: A Follow-up Study of Migrants' Adjustment, Assimilation, and Integration.* Bangkok: Institute for Population and Social Research, Mahidol University.

Chapman, Murray, and R. Mansell Prothero

1983 Themes in circulation in the Third World. *International Migration Review* 17 (winter):597–632.

Cochrane, Susan H.

1979 *The Population of Thailand: Its Growth and Welfare.* Staff Working Paper No. 337. Washington, D.C.: World Bank.

Das Gupta, A., and S. Sen Gupta

1967 Population projections for Thailand and a study of the elements and criteria. In *World Population Conference,* Vol. II, pp. 13–22. New York: United Nations.

Economic and Social Commission for Asia and the Pacific (ESCAP)

1982 *Country Reports*, Vol. V, *Migration, Urbanization, and Development in Thailand*. New York: United Nations.

Economic and Social Commission for Asia and the Pacific (ESCAP), Population Division

1984 *Urbanization in Thailand and Its Implications for the Family Planning Programme*. Population Research Leads, No. 17. Bangkok: Population Division, ESCAP.

Economic Commission for Asia and the Far East (ECAFE)

1967 *Report of the Expert Working Group on Problems of Internal Migration and Urbanization*. Bangkok: ECAFE.

Findley, Sally E.

1982 *Migration Survey Methodologies: A Review of Design Issues*. IUSSP Papers, No. 20. Liège: International Union for the Scientific Study of Population.

Goldstein, Sidney

1977 *Urbanization, Migration, and Fertility in Thailand*. Providence, R.I.: Population Studies and Training Center, Brown University.

Goldstein, Sidney, and Alice Goldstein

1978 Thailand's urban population reconsidered. *Demography* 15:239–58.

1981 *Surveys of Migration in Developing Countries: A Methodological Review*. Paper No. 71. Honolulu: East-West Population Institute, East-West Center.

Goldstein, Sidney, Pichit Pitaktepsombati, and Alice Goldstein

1976 Migration and urban growth in Thailand: An exploration of interrelations among origin, recency, and frequency of moves. In Anthony H. Richmond and Daniel Kubat, eds., *Internal Migration, The New World and The Third World*, pp. 116–47. Beverly Hills: Sage Publications.

Goldstein, Sidney, and David F. Sly

1975 *The Measurement of Urbanization and Projection of Urban Population*. Liège: International Union for the Scientific Study of Population.

The International Conference on Population, 1984

1984 *Population and Development Review* 10 (December):755–82.

Lim, E.R., J.D. Shilling, I.C. Porter, C. Chung, S.H. Cochrane, M. Cox, J.A. Edelman, C. Hermans, J.P. Meerman, and T. Ahmed

1980 *Thailand: Toward a Development Strategy of Full Participation*. World Bank Country Study. Washington, D.C.: World Bank.

Pejaranonda, Chintana, Fred Arnold, and Philip M. Hauser

1983 *Revised Estimates of the 1980 Population of Thailand.* Bangkok: National Statistical Office.

Pejaranonda, Chintana, Sidney Goldstein, and Alice Goldstein

1984 *Migration.* Subject Report No. 2. *1980 Population and Housing Census.* Bangkok: National Statistical Office.

Piampiti, Suwanlee

1985 *Internal Migration in Thailand, 1970–80.* Bangkok: National Institute of Development Administration.

Prachuabmoh, Visid, Ralph Thomlinson, Lincoln Polissar, Pricha Saengswang, Nibhon Debavalaya, Nangnoi Namatra, Sidney Goldstein, Dov Friedlander, James Fawcett, Allan Rosenfield, and John Knodel

1971 *The Methodology of the Longitudinal Study of Social, Economic, and Demographic Change in Thailand.* Research Report No. 6. Bangkok: Institute of Population Studies, Chulalongkorn University.

Robinson, Warren, and Chupensri Wongbuddha

1980 A revised set of urban population estimators for Thailand. In Warren Robinson, ed., *Studies in Thai Demographic-Economic Planning,* pp. 36–52. Bangkok: Population and Manpower Planning Division, National Statistical Office.

Shryock, Henry, Jacob Siegel, and Associates

1976 *The Methods and Materials of Demography.* Condensed edition by Edward G. Stockwell. New York: Academic Press.

Strategy for rural development

1982 *Bangkok Bank Monthly Review* 23 (October):414–22.

Thailand, National Economic Development Board

1957 *Final Report of the Demographic and Economic Survey of Thailand, 1954,* Vol. 2, *Demographic and Economic Features.* Bangkok: Central Statistical Bureau.

Thailand, National Statistical Office

1962 *Thailand Population Census, 1960.* Bangkok.

1972 *Statistical Yearbook of Thailand, 1970–1971.* Bangkok.

1973 *Thailand Population and Housing Census, 1970.* Bangkok.

1976 *Statistical Yearbook Thailand, 1974–1975.* Bangkok.

1978 *Report: The Survey of Population Change, 1974–1976.* Bangkok.

1983a *The Survey of Migration in Bangkok Metropolis, Nonthaburi, Pathumthani, and Samkut Prakan: 1983.* Bangkok.

1983b *Thailand Population Census, 1980.* Bangkok.

1984 *Statistical Yearbook of Thailand, 1981–84.* Bangkok.

Tirasawat, Penporn

1977 Urbanization and migrant adjustment in Thailand. Unpublished Ph.D. dissertation, Department of Sociology, Brown University, Providence, R.I.

United Nations

1970 *Methods of Measuring Internal Migration.* Population Studies No. 47. New York.

1982 *World Population Trends and Policies, 1981 Monitoring Report,* Vol. 2, *Population Policies.* Population Studies No. 79. New York.

1984 *Population Distribution, Migration and Development. International Conference on Population, 1984, Tunisia.* New York.

1985 *World Population Trends, Population and Development Interrelations and Population Policies: 1983 Monitoring Report,* Vol. 1, *Population Trends.* Population Studies No. 93. New York.

United States, Bureau of the Census

1964 *1960 Census of Population,* Vol. 1, *Characteristics of the Population,* Part 1, *United States Summary.* Washington, D.C.: Government Printing Office.

World Bank

1984 *World Development Report 1984.* New York: Oxford University Press.